

10045292

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NEWS 5 APR 28 IMSRESEARCH reloaded with enhancements  
NEWS 6 MAY 30 INPAFAMDB now available on STN for patent family  
searching  
NEWS 7 MAY 30 DGENE, PCTGEN, and USGENE enhanced with new homology  
sequence search option  
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patent numbers for U.S. applications  
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web-based collections  
NEWS 12 JUN 25 CA/CAPLUS and USPAT databases updated with IPC  
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NEWS 13 JUN 30 AEROSPACE enhanced with more than 1 million U.S.  
patent records  
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NEWS 15 JUN 30 STN on the Web enhanced with new STN AnaVist  
Assistant and BLAST plug-in  
NEWS 16 JUN 30 STN AnaVist enhanced with database content from EPFULL  
NEWS 17 JUL 28 CA/CAPLUS patent coverage enhanced  
NEWS 18 JUL 28 EPFULL enhanced with additional legal status  
information from the EPOLINE Register  
NEWS 19 JUL 28 IFICDB, IFIPAT, and IFIUDB reloaded with enhancements  
NEWS 20 JUL 28 STN Viewer performance improved  
NEWS 21 AUG 01 INPADOCDB and INPAFAMDB coverage enhanced  
NEWS 22 AUG 13 CA/CAPLUS enhanced with printed Chemical Abstracts  
page images from 1967-1998  
NEWS 23 AUG 15 CAOLD to be discontinued on December 31, 2008  
NEWS 24 AUG 15 CAPLUS currency for Korean patents enhanced  
NEWS 25 AUG 25 CA/CAPLUS, CASREACT, and IFI and USPAT databases  
enhanced for more flexible patent number searching  
NEWS 26 AUG 27 CAS definition of basic patents expanded to ensure  
comprehensive access to substance and sequence  
information  
  
NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,  
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.  
  
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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 11:06:27 ON 30 AUG 2008

=> file reg

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FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 11:07:04 ON 30 AUG 2008  
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DICTIONARY FILE UPDATES: 29 AUG 2008 HIGHEST RN 1044824-41-0

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L1 STRUCTURE UPLOADED

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L2 STRUCTURE UPLOADED

=>

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L3 STRUCTURE UPLOADED

=> s 11

SAMPLE SEARCH INITIATED 11:09:45 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 3190 TO ITERATE

62.7% PROCESSED 2000 ITERATIONS 20 ANSWERS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 60413 TO 67187  
PROJECTED ANSWERS: 300 TO 976

L4 20 SEA SSS SAM L1

=> s 12

SAMPLE SEARCH INITIATED 11:09:52 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 36 TO ITERATE

100.0% PROCESSED 36 ITERATIONS 2 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

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BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 360 TO 1080  
PROJECTED ANSWERS: 2 TO 124

L5 2 SEA SSS SAM L2

=> s 13  
SAMPLE SEARCH INITIATED 11:09:56 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 250 TO ITERATE

100.0% PROCESSED 250 ITERATIONS 1 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 4052 TO 5948  
PROJECTED ANSWERS: 1 TO 80

L6 1 SEA SSS SAM L3

=> s 12 full  
FULL SEARCH INITIATED 11:10:00 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 499 TO ITERATE

100.0% PROCESSED 499 ITERATIONS 7 ANSWERS  
SEARCH TIME: 00.00.01

L7 7 SEA SSS FUL L2

=> s 13 full  
FULL SEARCH INITIATED 11:10:13 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 5128 TO ITERATE

100.0% PROCESSED 5128 ITERATIONS 10 ANSWERS  
SEARCH TIME: 00.00.01

L8 10 SEA SSS FUL L3

=> file caplus  
COST IN U.S. DOLLARS SINCE FILE TOTAL  
ENTRY SESSION  
FULL ESTIMATED COST 358.10 358.31

FILE 'CAPLUS' ENTERED AT 11:10:19 ON 30 AUG 2008  
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FILE COVERS 1907 - 30 Aug 2008 VOL 149 ISS 10  
FILE LAST UPDATED: 29 Aug 2008 (20080829/ED)

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<http://www.cas.org/legal/infopolicy.html>

=> s 17 or 18  
65 L7  
212 L8

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L9 270 L7 OR L8

=> s l9 and (flavivirus or pestivirus or hcv or flaviviridae)

1791 FLAVIVIRUS  
886 FLAVIVIRUSES  
2079 FLAVIVIRUS  
(FLAVIVIRUS OR FLAVIVIRUSES)  
512 PESTIVIRUS  
272 PESTIVIRUSES  
608 PESTIVIRUS  
(PESTIVIRUS OR PESTIVIRUSES)  
14636 HCV  
24 HCVS  
14640 HCV  
(HCV OR HCVS)  
668 FLAVIVIRIDAE

L10 5 L9 AND (FLAVIVIRUS OR PESTIVIRUS OR HCV OR FLAVIVIRIDAE)

=> d bib abs hitstr 1-5 l10

L10 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:1151410 CAPLUS

DN 145:336253

TI Synthesis and in vitro anti-HCV activity of  $\beta$ -D- and  
L-2'-deoxy-2'-fluororibonucleosides

AU Shi, Junxing; Du, Jinfa; Ma, Tianwei; Pankiewicz, Krzysztof W.; Patterson,  
Steven E.; Hassan, Abdalla E. A.; Tharnish, Phillip M.; McBrayer, Tamara  
R.; Lostia, Stefania; Stuyver, Lieven J.; Watanabe, Kyoichi A.; Chu, Chung  
K.; Schinazi, Raymond E.

CS Pharmasset, Inc., Tucker, GA, USA

SO Nucleosides, Nucleotides & Nucleic Acids (2005), 24(5-7), 875-879

CODEN: NNNAFY; ISSN: 1525-7770

PB Taylor & Francis, Inc.

DT Journal

LA English

OS CASREACT 145:336253

AB Based on the discovery of  $\beta$ -D-2'-deoxy-2'-fluorocytidine as a potent  
anti-hepatitis C virus (HCV) agent, a series of  $\beta$ -D- and  
L-2'-deoxy-2'-fluororibonucleosides with modifications at 5 and/or 4  
positions were synthesized and evaluated for their in vitro activity  
against HCV and bovine viral diarrhea virus (BVDV). The  
introduction of the 2'-fluoro group was achieved by either fluorination of  
2,2'-anhydronucleosides with hydrogen fluoride-pyridine or potassium  
fluoride, or a fluorination of arabinonucleosides with DAST. Among the  
analogues synthesized, only the 5-fluoro compds., namely  
 $\beta$ -D-2'-deoxy-2',5-difluorocytidine, had anti-HCV activity  
in the subgenomic HCV replicon cell line, and inhibitory  
activity against rRNA. As  $\beta$ -D-N4-hydroxycytidine (NHC) had  
previously shown potent anti-HCV activity, the two  
functionalities of the N4-hydroxyl and the 2'-fluoro were combined into  
one mol., yielding  $\beta$ -D-2'-deoxy-2'-fluoro-N4-hydroxycytidine.  
However, this nucleoside showed neither anti-HCV activity nor  
toxicity. All the L-forms of the analogues were devoid of anti-HCV  
activity. None of the compds. showed anti-BVDV activity, suggesting that  
the BVDV system cannot reliably predict anti-HCV activity in  
vitro.

IT 3258-02-4

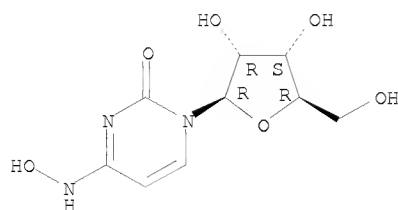
RL: PAC (Pharmacological activity); BIOL (Biological study)  
(preparation and anti-HCV, anti-BVDV, rRNA inhibition activity of  
 $\beta$ -D- and L-2'-deoxy-2'-fluororibonucleosides via fluorination of  
anhydronucleosides and arabinonucleosides)

RN 3258-02-4 CAPLUS

CN Uridine, 4-oxime (CA INDEX NAME)

Absolute stereochemistry.

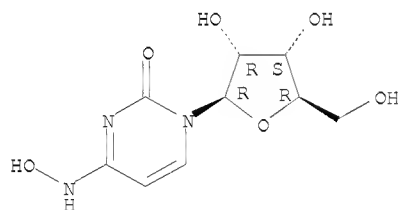
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RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2004:1065490 CAPLUS  
DN 142:147801  
TI Metabolism of the anti-hepatitis C virus nucleoside  $\beta$ -D-N4-hydroxycytidine in different liver cells  
AU Hernandez-Santiago, Brenda I.; Beltran, Thierry; Stuyver, Lieven; Chu, Chung K.; Schinazi, Raymond F.  
CS Department of Pediatrics, Emory School of Medicine, Decatur, USA  
SO Antimicrobial Agents and Chemotherapy (2004), 48(12), 4636-4642  
CODEN: AMACQ; ISSN: 0066-4804  
PB American Society for Microbiology  
DT Journal  
LA English  
AB  $\beta$ -D-N4-Hydroxycytidine (NHC) was found to have selective anti-hepatitis C virus (HCV) activity in the HCV replicon system (clone A). The intracellular metabolism of tritiated NHC was investigated in the HCV replicon system, Huh-7 cells, HepG2 cells, and primary human hepatocytes. Incubation of cells with 10  $\mu$ M radiolabeled NHC demonstrated extensive and rapid phosphorylation in all liver cells. Besides the 5'-mono-, -di-, and -triphosphate metabolites of NHC, other metabolites were characterized. These included cytidine and uridine mono-, di-, and triphosphates. UTP was the predominant early metabolite in Huh-7 cells and primary human hepatocytes, suggesting deamination of NHC as the primary catabolic pathway. The intracellular half-lives of radiolabeled NHC-triphosphate and of CTP and UTP derived from NHC incubation in Huh-7 cells were calculated to be  $3.0 \pm 1.3$ ,  $10.4 \pm 3.3$ , and  $13.2 \pm 3.5$  h, resp. Studies using monkey and human whole blood demonstrated more-rapid deamination and oxidation in monkey cells than in human cells, suggesting that NHC may not persist long enough in plasma to be delivered to liver cells.  
IT 3258-02-4  
RL: PKT (Pharmacokinetics); BIOL (Biological study)  
(metabolism of the anti-hepatitis C virus nucleoside  $\beta$ -D-N4-hydroxycytidine in different liver cells)  
RN 3258-02-4 CAPLUS  
CN Uridine, 4-oxime (CA INDEX NAME)

Absolute stereochemistry.



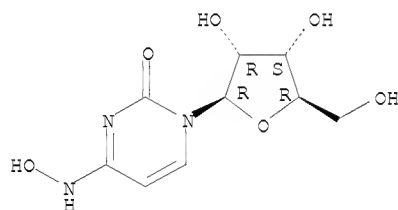
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2003:26945 CAPLUS  
DN 139:381  
TI Ribonucleoside analogue that blocks replication of bovine viral diarrhea and hepatitis C viruses in culture  
AU Stuyver, Lieven J.; Whitaker, Tony; McBrayer, Tamara R.;

McIntosh

Hernandez-Santiago, Brenda I.; Lostia, Stefania; Tharnish, Phillip M.; Ramesh, Mangala; Chu, Chung K.; Jordan, Robert; Shi, Junxing; Rachakonda, Suguna; Watanabe, Kyoichi A.; Otto, Michael J.; Schinazi, Raymond F.  
 CS Pharmasset Inc., Tucker, GA, 30084, USA  
 SO Antimicrobial Agents and Chemotherapy (2003), 47(1), 244-254  
 CODEN: AMACQ; ISSN: 0066-4804  
 PB American Society for Microbiology  
 DT Journal  
 LA English  
 AB A base-modified nucleoside analog,  $\beta$ -D-N4-hydroxycytidine (NHC), was found to have antipestivirus and antihepacivirus activities. This compound inhibited the production of cytopathic bovine viral diarrhea virus (BVDV) RNA in a dose-dependent manner with a 90% effective concentration (EC90) of 5.4  $\mu$ M, an observation that was confirmed by virus yield assays (EC90 = 2  $\mu$ M). When tested for hepatitis C virus (HCV) replicon RNA reduction in Huh7 cells, NHC had an EC90 of 5  $\mu$ M on day 4. The HCV RNA reduction was incubation time and nucleoside concentration dependent. The in vitro antiviral effect of NHC was additive with recombinant alpha interferon-2a and could be prevented by the addition of exogenous cytidine and uridine but not of other natural ribo- or 2'-deoxynucleosides. When HCV RNA replicon cells were cultured in the presence of increasing concns. of NHC (up to 40  $\mu$ M) for up to 45 cell passages, no resistant replicon was selected. Similarly, resistant BVDV could not be selected after 20 passages. NHC was phosphorylated to the triphosphate form in Huh7 cells, but in cell-free HCV NS5B assays, synthetic NHC-triphosphate (NHC-TP) did not inhibit the polymerization reaction. Instead, NHC-TP appeared to serve as a weak alternative substrate for the viral polymerase, thereby changing the mobility of the product in polyacrylamide electrophoresis gels. We speculate that incorporated nucleoside analogs with the capacity of changing the thermodyn. of regulatory secondary structures (with or without introducing mutations) may represent an important class of new antiviral agents for the treatment of RNA virus infections, especially HCV.  
 IT 3258-02-4, N4-Hydroxycytidine  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (N4-hydroxycytidine blocks replication of bovine viral diarrhea and hepatitis C viruses in culture)  
 RN 3258-02-4 CAPLUS  
 CN Uridine, 4-oxime (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

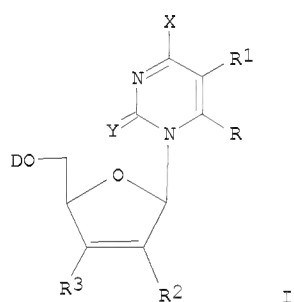
L10 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2002:314958 CAPLUS  
 DN 136:340939  
 TI Preparation of modified nucleosides for treatment of viral infections and abnormal cellular proliferation  
 IN Stuyver, Lieven; Watanabe, Kyoichi A.  
 PA Pharmasset Limited, USA  
 SO PCT Int. Appl., 230 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002032920	A2	20020425	WO 2001-US46113	20011018
	WO 2002032920	A3	20040219		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2426187	A1	20020425	CA 2001-2426187	20011018
AU 2002028749	A	20020429	AU 2002-28749	20011018
US 20030087873	A1	20030508	US 2001-45292	20011018
EP 1411954	A2	20040428	EP 2001-987756	20011018
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
JP 2004533406	T	20041104	JP 2002-536301	20011018
CN 1646141	A	20050727	CN 2001-820816	20011018
BR 2001014837	A	20060509	BR 2001-14837	20011018
AU 2002228749	B2	20080424	AU 2002-228749	20011018
US 20070031824	A1	20070208	US 2004-854870	20040527
US 20070196824	A1	20070823	US 2007-686499	20070315
AU 2007240180	A1	20080103	AU 2007-240180	20071207
KR 2008041296	A	20080509	KR 2008-707867	20080331
PRAI US 2000-241488P	P	20001018		
US 2001-282156P	P	20010406		
US 2000-256067P	P	20001215		
US 2001-8140	B1	20011018		
WO 2001-US46113	W	20011018		
KR 2003-705461	A3	20030418		
US 2004-854870	A3	20040527		
OS MARPAT 136:340939				
GI				



AB Modified nucleosides, e.g. I, wherein D is hydrogen, alkyl, acyl, monophosphate, diphosphate, triphosphate, monophosphate ester, diphosphate ester, triphosphate ester, phospholipid or amino acid; X is H, halogen, NH<sub>2</sub>, substituted amine, oxime, OH, alkoxy, SH, thioalkyl; Y is O, S, Se; R and R<sub>1</sub> are independently H, alkyl, alkenyl, alkynyl, aryl, alkylaryl, halogen, NH<sub>2</sub>, substituted amine, oxime, hydrazine, OH, alkoxy, SH, thioalkyl, NO<sub>2</sub>, NO, CH<sub>2</sub>OH, CH<sub>2</sub>OH, ester, CONH<sub>2</sub>, amide, CN; R<sub>2</sub> and R<sub>3</sub> are independently H, halogen, OH, SH, OMe, SMe, NH<sub>2</sub>, NHMe, CH:CH<sub>2</sub>, CN, CH<sub>2</sub>NH<sub>2</sub>, CH<sub>2</sub>OH, CO<sub>2</sub>H; were prepared for treating a Flaviviridae (including BVDV and HCV), Orthomyxoviridae (including Influenza A and B) or Paramyxoviridae (including RSV) infection, or conditions related to abnormal cellular proliferation, in a host, including animals, and especially humans. This invention also provides an effective process to quantify the viral load, and in particular BVDV, HCV or West Nile Virus load, in a host, using real-time polymerase chain reaction ("TR-PCR"). Addnl., the invention discloses probe mols. that can fluoresce proportionally to the amount of virus present in a sample. Thus, (1'R,2'S,3'R,4'R)-1-[2,3-dihydroxy-4-(hydroxymethyl)cyclopentan-1-yl]-5-fluorocytosine was prepared and tested in vitro as antiviral and antitumor agent.

IT 13491-41-3P 13491-47-9P 402725-23-9P  
415705-01-0P 415705-11-2P  
RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN

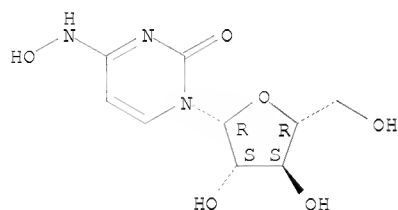
10045292

(Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);  
PREP (Preparation); USES (Uses)  
(preparation of modified nucleosides for treatment of viral infections and  
abnormal cellular proliferation)

RN 13491-41-3 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-β-D-arabinofuranosyl-, 4-oxime (9CI)  
(CA INDEX NAME)

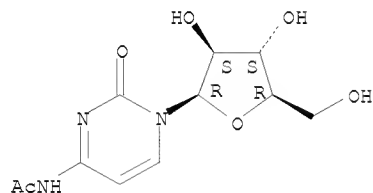
Absolute stereochemistry.



RN 13491-47-9 CAPLUS

CN Acetamide, N-(1-β-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)-  
(CA INDEX NAME)

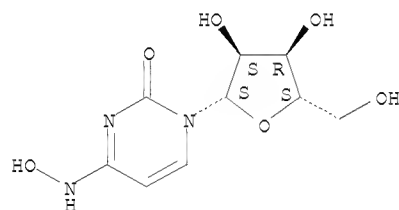
Absolute stereochemistry.



RN 402725-23-9 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-β-L-ribofuranosyl-, 4-oxime (9CI) (CA  
INDEX NAME)

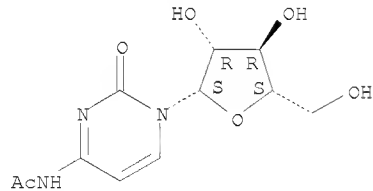
Absolute stereochemistry.



RN 415705-01-0 CAPLUS

CN Acetamide, N-(1-β-L-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)-  
(CA INDEX NAME)

Absolute stereochemistry.



RN 415705-11-2 CAPLUS

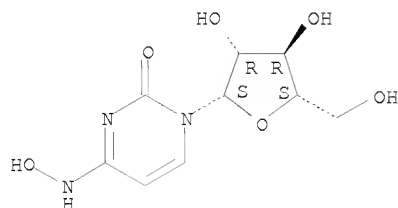
CN 2,4(1H,3H)-Pyrimidinedione, 1-β-L-arabinofuranosyl-, 4-oxime (9CI)  
(CA INDEX NAME)

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10045292

Absolute stereochemistry.



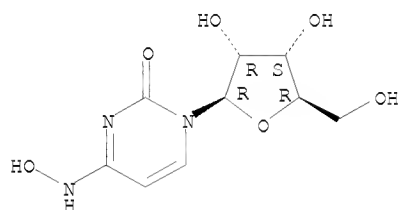
IT 3258-02-4P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of modified nucleosides for treatment of viral infections and abnormal cellular proliferation)

RN 3258-02-4 CAPLUS

CN Uridine, 4-oxime (CA INDEX NAME)

Absolute stereochemistry.



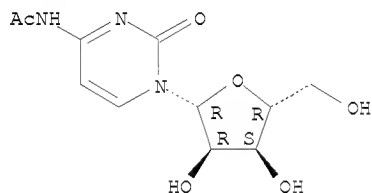
IT 3768-18-1

RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of modified nucleosides for treatment of viral infections and abnormal cellular proliferation)

RN 3768-18-1 CAPLUS

CN Cytidine, N-acetyl- (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2002:171918 CAPLUS

DN 136:217007

TI Preparation of antiviral nucleoside derivatives as inhibitors of subgenomic hepatitis C virus RNA replication

IN Devos, Rene; Dymock, Brian William; Hobbs, Christopher John; Jiang, Wen-rong; Martin, Joseph Armstrong; Merrett, John Herbert; Najera, Isabel; Shimma, Nobuo; Tsukuda, Takuo

PA F. Hoffmann-La Roche Ag, Switz.

SO PCT Int. Appl., 225 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002018404	A2	20020307	WO 2001-EP9633	20010821
	WO 2002018404	A9	20031002		

McIntosh

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 20030008841	A1	20030109	US 2001-923620	20010807
CA 2419399	A1	20020307	CA 2001-2419399	20010821
AU 2001095497	A	20020313	AU 2001-95497	20010821
EP 1315736	A2	20030604	EP 2001-976128	20010821

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

BR 2001013611	A	20030624	BR 2001-13611	20010821
JP 2004513083	T	20040430	JP 2002-523918	20010821
ZA 2003001540	A	20040621	ZA 2003-1540	20030225
MX 2003PA01775	A	20030604	MX 2003-PA1775	20030227
US 20040110718	A1	20040610	US 2003-678804	20031003

PRAI GB 2000-21285 A 20000830

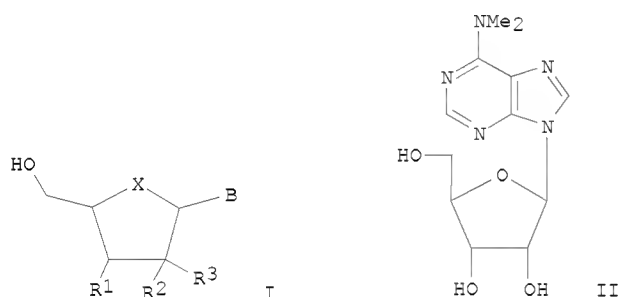
GB 2000-26611 A 20001031

US 2001-923620 B1 20010807

WO 2001-EP9633 W 20010821

OS MARPAT 136:217007

GI



AB Nucleosides I, wherein R1 is hydrogen, hydroxy, alkyl, hydroxyalkyl, alkoxy, halogen, cyano, isocyano or azido; R2 is hydrogen, hydroxy, alkoxy, chlorine, bromine or iodine; R3 is hydrogen; or R2 and R3 together represent =CH2; or R2 and R3 represent fluorine; X is O, S or CH2; B is a substituted purine base, were prepared as inhibitors of subgenomic hepatitis C virus (HCV) RNA replication. Thus, nucleoside II was prepared and tested for the inhibition of HCV RNA replication (EC50 = 0.6  $\mu$ M).

IT 3258-02-4P 3768-18-1P 13491-41-3P  
402725-23-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

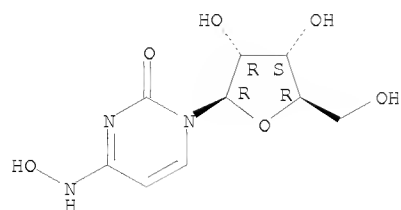
(preparation of antiviral nucleoside derivs. as inhibitors of subgenomic hepatitis C virus RNA replication)

RN 3258-02-4 CAPLUS

CN Uridine, 4-oxime (CA INDEX NAME)

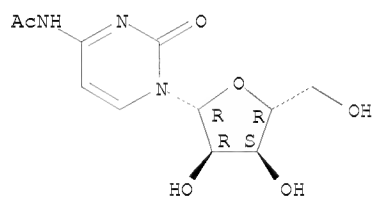
Absolute stereochemistry.

10045292



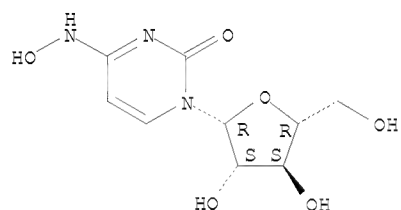
RN 3768-18-1 CAPLUS  
CN Cytidine, N-acetyl- (CA INDEX NAME)

Absolute stereochemistry.



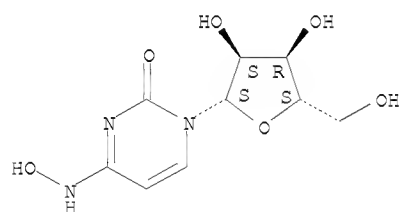
RN 13491-41-3 CAPLUS  
CN 2,4(1H,3H)-Pyrimidinedione, 1-beta-D-arabinofuranosyl-, 4-oxime (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



RN 402725-23-9 CAPLUS  
CN 2,4(1H,3H)-Pyrimidinedione, 1-beta-L-ribofuranosyl-, 4-oxime (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.



=> d his

(FILE 'HOME' ENTERED AT 11:06:27 ON 30 AUG 2008)

FILE 'REGISTRY' ENTERED AT 11:07:04 ON 30 AUG 2008

L1	STRUCTURE	UPLOADED
L2	STRUCTURE	UPLOADED
L3	STRUCTURE	UPLOADED
L4	20 S	L1
L5	2 S	L2
L6	1 S	L3

McIntosh

10045292

L7 7 S L2 FULL  
L8 10 S L3 FULL

FILE 'CAPLUS' ENTERED AT 11:10:19 ON 30 AUG 2008

L9 270 S L7 OR L8  
L10 5 S L9 AND (FLAVIVIRUS OR PESTIVIRUS OR HCV OR FLAVIVIRIDAE)

=> s l1 full

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...  
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 11:12:20 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 63708 TO ITERATE

100.0% PROCESSED 63708 ITERATIONS 666 ANSWERS  
SEARCH TIME: 00.00.01

L11 666 SEA SSS FUL L1

L12 2495 L11

=> s l12 and (flavivirus or pestivirus or hcv or flaviviridae)

1791 FLAVIVIRUS  
886 FLAVIVIRUSES  
2079 FLAVIVIRUS  
(FLAVIVIRUS OR FLAVIVIRUSES)  
512 PESTIVIRUS  
272 PESTIVIRUSES  
608 PESTIVIRUS  
(PESTIVIRUS OR PESTIVIRUSES)  
14636 HCV  
24 HCVS  
14640 HCV  
(HCV OR HCVS)  
668 FLAVIVIRIDAE

L13 46 L12 AND (FLAVIVIRUS OR PESTIVIRUS OR HCV OR FLAVIVIRIDAE)

=> d bib abs hitstr 1-46

L13 ANSWER 1 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2008:529326 CAPLUS

DN 148:510687

TI Method for detecting nucleotide variations in drug-resistant pathogen or  
SNPs in human genes

IN Chun, Jong Yoon

PA Seegene, Inc., S. Korea

SO PCT Int. Appl., 42pp.

CODEN: PIXXD2

DT Patent

LA English

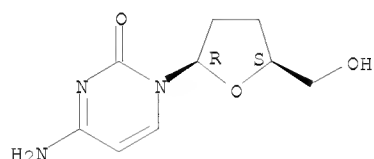
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2008051039	A1	20080502	WO 2007-KR5291	20071025
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	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

McIntosh

KR 2008037128 A 20080430 KR 2006-103745 20061025  
 PRAI KR 2006-103745 A 20061025  
 AB The present invention relates to methods for detecting nucleotide variations. According to the present invention, at least two nucleotide variations in the target sequence can be accurately detected without false results by a simple amplification reaction without addnl. procedure such as restriction enzyme treatment and sequencing. The method is carried out to detect a drug-resistant pathogen such as HIV-1, HIV-2, HBV (hepatitis B virus), HCV (hepatitis C virus) or human herpesvirus. Primers for detecting lamivudine resistant hepatitis B virus are provided. Multiplex PCR for the specific detection of single nucleotide polymorphism in human genes with no false-neg. and false-pos. results was also provided.  
 IT 7481-89-2, Zalcitabine  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (resistant to; method for detecting nucleotide variations in drug-resistant pathogen)  
 RN 7481-89-2 CAPLUS  
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



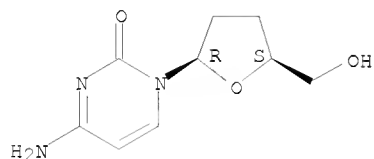
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2008:367020 CAPLUS  
 DN 148:509481  
 TI Liver toxicity of antiretroviral combinations including atazanavir/ritonavir in patients co-infected with HIV and hepatitis viruses: impact of pre-existing liver fibrosis  
 AU Pineda, J. A.; Santos, J.; Rivero, A.; Abdel-Kader, L.; Palacios, R.; Camacho, A.; Lozano, F.; Macias, J.  
 CS Unidad de Enfermedades Infecciosas, Hospital Universitario de Valme, Seville, Spain  
 SO Journal of Antimicrobial Chemotherapy (2008), 61(4), 925-932  
 CODEN: JACHDX; ISSN: 0305-7453  
 PB Oxford University Press  
 DT Journal  
 LA English  
 AB The aim of this study was to appraise the rate of grade 3-4 transaminase elevations (TEs) and grade 4 total bilirubin elevation (TBE) in patients co-infected with human immunodeficiency virus (HIV) and hepatitis C or hepatitis B virus (HCV or HBV, resp.) who receive atazanavir/ritonavir. Moreover, the relationship between these events and the degree of prior liver fibrosis was evaluated. A cohort of 189 HIV-infected patients, 175 co-infected with HCV, 4 with HBV and 10 with both, receiving atazanavir/ritonavir, was analyzed. Baseline liver fibrosis was assessed in 113 (60%) patients. Twenty-four patients had cirrhosis, whereas such a diagnosis was ruled out in 58 patients. Twelve (6%) and 28 (15%) patients developed grade 3-4 TEs and grade 4 TBE, resp. Eight (10%) of 84 patients with fibrosis  $\geq$ F2 vs. 1 of 29 (3%) with F0-F1 ( $P = 0.51$ ) developed grade 3-4 TEs. The frequencies of grade 3-4 TEs in patients with and without cirrhosis were 8% and 5% ( $P = 0.63$ ), resp. Grade 4 TBE was more common among patients with cirrhosis (35% vs. 13%,  $P = 0.05$ ) in the univariate anal. In the multivariate study, the only predictor of grade 3-4 TEs was baseline CD4 cell count  $<300$  cells/mm<sup>3</sup> [adjusted OR (AOR) (95% CI) = 8.77 (1.07-71.42),  $P = 0.04$ ]. The factors independently associated with grade 4 TBE were baseline total bilirubin  $>1$  mg/dL [AOR (95% CI) = 3.2 (1.21-8.45),  $P = 0.01$ ] and age  $>40$  years [AOR (95% CI) = 2.98 (1.19-7.47),  $P = 0.02$ ]. Prior significant liver fibrosis or cirrhosis do not increase substantially the risk of severe TE associated with atazanavir/ritonavir in patients co-infected with HIV and hepatitis viruses.

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IT 7481-89-2, Zalcitabine  
RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(liver toxicity of antiretroviral combinations in patients co-infected  
with HIV and hepatitis viruses and impact of pre-existing liver  
fibrosis)  
RN 7481-89-2 CAPLUS  
CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2008:352859 CAPLUS  
DN 148:394354  
TI Compositions and methods for treatment of viral diseases  
IN Johansen, Lisa M.; Owens, Christopher M.; Mawhinney, Christina; Chappell,  
Todd W.; Brown, Alexander T.; Frank, Michael G.; Altmeyer, Ralf  
PA Combinatorx (Singapore) Pre. Ltd., Singapore  
SO PCT Int. Appl., 237pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2008033466	A2	20080320	WO 2007-US19932	20070913
	W:				
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	RW:				
	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	US 20080161324	A1	20080703	US 2007-900893	20070913
PRAI	US 2006-844463P	P	20060914		
	US 2006-874061P	P	20061211		

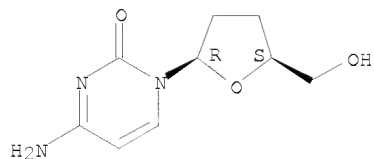
AB Based on the results of the authors screen identifying compds. and combinations of compds. having antiviral activity, the present invention features compns., methods, and kits useful in the treatment of viral diseases. In certain embodiments, the viral disease is caused by a single stranded RNA virus, a flaviviridae virus, or a hepatic virus. In particular embodiments, the viral disease is viral hepatitis (e.g., hepatitis A, hepatitis B, hepatitis C, hepatitis D, hepatitis E). Also featured are screening methods for identification of novel compds. that may be used to treat a viral disease.

IT 7481-89-2, Zalcitabine 7481-89-2D, Zalcitabine,  
Phosphatidyl derivs. 121154-51-6, L-DdC  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(compns. and methods for treatment of viral diseases)  
RN 7481-89-2 CAPLUS  
CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

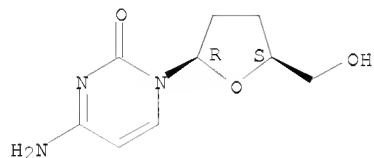
McIntosh

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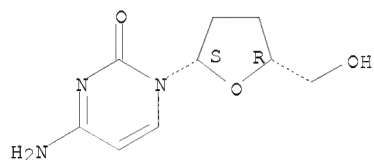
RN 7481-89-2 CAPLUS  
CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 121154-51-6 CAPLUS  
CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



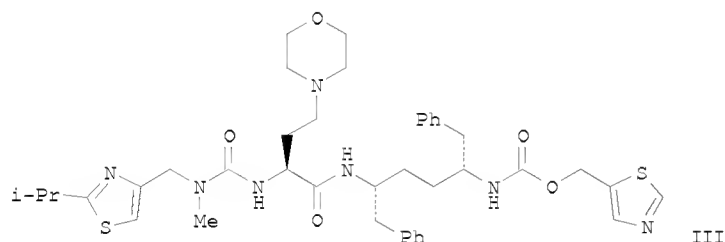
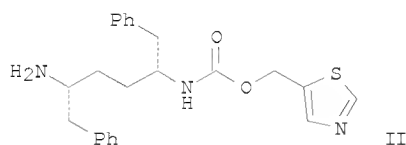
L13 ANSWER 4 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2008:90893 CAPLUS  
DN 148:192198  
TI Preparation of peptidomimetics as modulators of pharmacokinetic properties of therapeutics by inhibiting cytochrome P450 monooxygenase  
IN Desai, Manoj C.; Hong, Allen Yu; Liu, Hongtao; Xu, Lianhong; Vivian, Randall W.  
PA Gilead Sciences, Inc., USA  
SO PCT Int. Appl., 346pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2008010921	A2	20080124	WO 2007-US15604	20070706
	WO 2008010921	A3	20080710		
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	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			
	US 20080108617	A1	20080508	US 2007-825605	20070706
PRAI	US 2006-819315P	P	20060707		
	US 2006-832371P	P	20060721		
	US 2007-903228P	P	20070223		
OS	MARPAT 148:192198				

McIntosh

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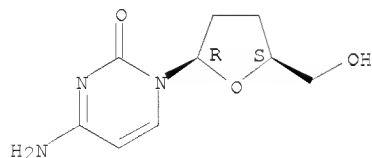
GI



AB The invention is related to the preparation of R8YZ1[CONR1(CR2R2)m]nL1NR3CH[L3A (L4Ar)p]CHR4L2CH[L3A(L4Ar)p]NR5COZ2XR9 [I; L1 = C(R6)2, CO, SO2, NHCO and derivs., OCO; R4, R6 = independently H, heteroalkyl, (un)substituted alkyl; L2 = a covalent bond, C(R6)2, CO; each L3 = independently a covalent bond, (un)substituted alkylene; each L4 = L3, O, CH2O, NH; each A = H, (un)substituted alkyl, aryl, heterocyclyl with the proviso that when A = H, p = 0; Z1, Z2 = independently O, NH and derivs.; Y, X = independently heterocyclyl, heterocyclylalkyl; each Ar = independently (un)substituted (hetero)aryl; R1, R3, R5 = independently H, (un)substituted aryl/alkyl; each R2 = independently H, (un)substituted arylhetero/hydroxy/amino/alkyl, alkylene-CO2H, alkylene-CO-alkyl, etc.; R8, R9 are each one or more H's or substituents selected from Cl, CN, (un)substituted alkyl, aryl, heterocyclyl; m = 1-2; n = 0-1; each p = independently 0-1], their pharmaceutically acceptable salts, solvates and esters, and compns. containing them which improve the pharmacokinetics of a co-administered drug which is metabolized by cytochrome P 450 monooxygenase. Thus, a multi-step synthesis using 2-isopropyl-4-[(methylamino)methyl]-1,3-thiazole, (2S)-2-amino-4-[(tert-butoxycarbonyl)amino]butanoic acid Me ester, amine II and (BrCH2CH2)2O was given for III. III inhibited CYP450 3A4 (IC50 = 80-150 nM), CYP450 2C9 (IC50 = 1,000-10,000 nM) and protease (EC50 > 20,000 nM in an anti HIV-1 cell culture assay). I alone or in combination with one or more addnl. therapeutic agents which are metabolized by cytochrome P 450 monooxygenase are useful for treating a viral infection, e.g. HIV (no data).

IT 7481-89-2, Zalcitabine  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (compds. as modulators of pharmacokinetic properties of therapeutic agents)  
 RN 7481-89-2 CAPLUS  
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 5 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2008:42485 CAPLUS  
 DN 148:121966

McIntosh



TI Preparation of proline dipeptides and analogs as inhibitors of hepatitis c virus replication  
 IN Blatt, Lawrence M.; Seiwert, Scott; Beigelman, Leonid; Kercher, Timothy; Kennedy, April L.; Andrews, Steven W.  
 PA Intermune, Inc., USA; Array Biopharma, Inc.  
 SO PCT Int. Appl., 126pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

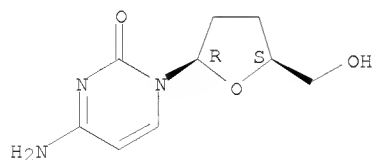
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2008005511	A2	20080110	WO 2007-US15530	20070605
	WO 2008005511	A3	20080731		
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	US 20080019942	A1	20080124	US 2007-773912	20070705
PRAI	US 2006-818914P	P	20060705		
	US 2006-819128P	P	20060706		
OS	MARPAT 148:121966				
GI					

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention is related to the preparation of title compds. I [R1, R2 = independently (un)substituted H, halo, CN, CF3, aryl, etc.; or R1 and R2 taken together form an (un)substituted cycloalkyl, (hetero)aryl; R3, R4 = H, independently (un)substituted heteroaryl/aryl/cyclo/cycloalkyl/alkyl; or CR3R4 = (un)substituted cycloalkyl; R5 = H, (un)substituted alkyl, aryl, alkoxy, carbonylaminoalkyl, heteroaryl, etc.; Y = CONHSO2R1a, CONHSO2NR1aR1b, COCONR1aR1b, COCO2H, CONHR1a, COOR1a, CONHCOR1a, CO2H; R1a, R1b = independently H, (un)substituted heteroaryl/aryl/cycloalkylalkyl/cyclo/alkyl, (hetero)/aryl; or NR1aR1b = (un)substituted 3-6 membered alkyl cyclic secondary amine; or NR1aR1b = heteroaryl or heterocyclic ring] and II [A = OH, NHCR3R4Y; R5a = H, (un)substituted heteroaryl/aryl/cycloalkyl/cyclo/alkyl, (hetero)/aryl], their pharmaceutical acceptable salts, prodrugs or ester, their pharmaceutical compns. and their use as inhibitors of NS3/NS4 protease and hepatitis c virus (HCV) replication for treating liver fibrosis. Thus, III, prepared by a multi-step synthesis starting from Et 4-oxopiperidine-3-carboxylate hydrochloride, inhibited NS3/NS4 protease with an IC50 value between 10 and 50 µM.

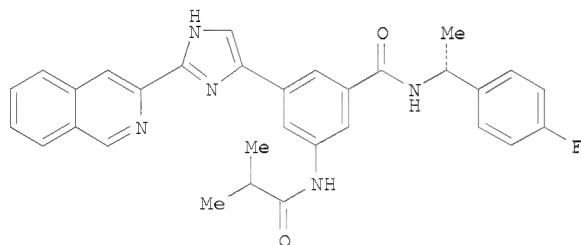
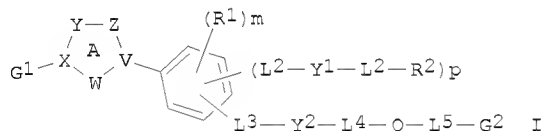
IT 7481-89-2, 2',3'-Dideoxycytidine  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (novel inhibitors of hepatitis C virus replication useful in treatment of hepatitis C and associated diseases)  
 RN 7481-89-2 CAPLUS  
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 6 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2007:1054300 CAPLUS  
 DN 147:385981  
 TI Preparation of nitrogen-containing heterocycle derivatives as antiviral agents  
 IN Mjalli, Adnan M. M.; Cooper, Jeremy T.; Arimilli, Murty N.; Andrews, Robert C.; Rothlein, Robert; Altel, Taleb H.  
 PA USA  
 SO U.S. Pat. Appl. Publ., 53pp.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070219239	A1	20070920	US 2007-704763	20070209
	WO 2008054454	A2	20080508	WO 2007-US3580	20070209
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
PRAI	US 2006-772309P	P	20060210		
OS	MARPAT 147:385981				
GI					



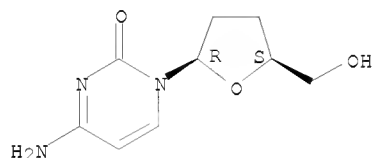
II

AB Title compds. I [R1 = CN, CF3, OCF3, NO2, cycloalkyl, etc.; R2 = halo, NH2, CO2H, OH, (cyclo)alkyl, (hetero)aryl, etc.; G1 and G2 independently = (un)substituted cycloalkyl, heterocyclyl, aryl, heteroaryl, fused arylcycloalkyl, fused cycloalkylaryl, fused cycloalkylheteroaryl, fused heterocyclylaryl or fused heterocyclylheteroaryl; L1, L2 and L5 independently = direct bond, (un)substituted alkylene, alkenylene or alkynylene; L3 and L4 independently = direct bond, (un)substituted alkylene, alkenylene, alkynylene, arylene or heteroarylene; Y1 and Y2 independently = direct bond, O, C(O), S, OC(O), SO, SO2, etc.; ring A = 5-membered saturated heterocyclyl; V and X independently = C or N; W, Y or Z independently = O, S, NR5 or CR6; Q = (CR3R4)n, wherein R3-6 independently = H, (un)substituted (cyclo)alkyl, alkylene-cycloalkyl or aryl; CR3R4 = (un)substituted 5- to 7-membered (hetero)cyclyl; n = 0-1; m and p independently = 0-2], and their pharmaceutically acceptable salts,

solvates or prodrugs thereof, are prepared and disclosed as antiviral agents. Thus, e.g., II was prepared in 11 steps starting from 5-nitroisophthalic acid monomethyl ester and using [(R)-4-fluorophenethyl]amine. Exemplar compds. of the invention were found to inhibit viral replication in vaccinia viral assay with an EC50 of  $\leq 100 \mu\text{M}$ , e.g., II showed EC50 value of  $\leq 0.5 \mu\text{M}$ . As antiviral agents, I should prove useful in the treatment of viral infections and may be administered to a subject for antiviral therapy or prophylaxis.

IT 7481-89-2  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (preparation of N-containing heterocycle derivs. as antiviral agents for the treatment of viral infections)  
 RN 7481-89-2 CAPLUS  
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 7 OF 46 CAPLUS COPYRIGHT 2008 ACS on SIN

AN 2007:672664 CAPLUS

DN 147:64497

TI Diaryl urea for treating virus infections

IN Weber, Olaf; Riedl, Bernd

PA Bayer Healthcare A.-G., Germany

SO PCT Int. Appl., 90pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2007068380	A1	20070621	WO 2006-EP11690	20061206
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
PRAI EP 2005-27453	A	20051215		
EP 2005-27455	A	20051215		
EP 2005-27457	A	20051215		
EP 2005-27459	A	20051215		
EP 2005-27461	A	20051215		
EP 2005-27463	A	20051215		
EP 2005-27464	A	20051215		
EP 2005-27466	A	20051215		
EP 2005-27470	A	20051215		
EP 2005-27472	A	20051215		

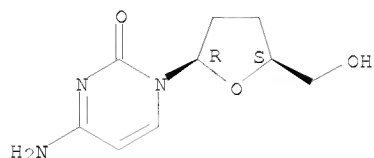
AB The present invention relates to pharmaceutical compns. for treating virus infections and/or diseases caused thereby comprising 4{4-[3-(4-chloro-3-trifluoromethylphenyl)-ureido]-3-fluorophenoxy}-pyridine-2-carboxylic acid methylamide optionally combined with at least one addnl. therapeutic agent. The addnl. therapeutic agents may include antiviral agents, corticosteroids, and/or immunomodulatory agents.

IT 7481-89-2, Zalcitabine  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (diaryl urea for treating virus infections optionally combined with

10045292

addnl. therapeutic agent)  
RN 7481-89-2 CAPLUS  
CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



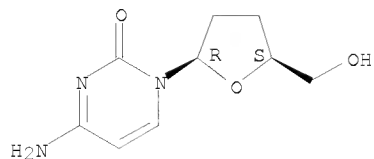
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 8 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2007:671929 CAPLUS  
DN 147:87614  
TI Diaryl ureas for treating virus infections  
IN Weber, Olaf; Riedl, Bernd  
PA Bayer Healthcare A.-G., Germany  
SO PCT Int. Appl., 114pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007068383	A1	20070621	WO 2006-EP11693	20061206
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
PRAI	EP 2005-27451	A	20051215		
	EP 2005-27452	A	20051215		
	EP 2005-27454	A	20051215		
	EP 2005-27456	A	20051215		
	EP 2005-27458	A	20051215		
	EP 2005-27460	A	20051215		
	EP 2005-27462	A	20051215		
	EP 2005-27465	A	20051215		
	EP 2005-27467	A	20051215		
	EP 2005-27471	A	20051215		
OS	MARPAT 147:87614				
AB	The invention relates to pharmaceutical compns. for treating virus infections and/or diseases caused by virus infections comprising at least a diaryl urea compound optionally combined with at least one addnl. therapeutic agent. Useful combinations include e.g. BAY 43-9006 as a diaryl urea compound				
IT	7481-89-2, Zalcitabine				
	RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (diaryl ureas for treatment of virus infections, and use with other agents)				
RN	7481-89-2 CAPLUS				
CN	Cytidine, 2',3'-dideoxy- (CA INDEX NAME)				

Absolute stereochemistry. Rotation (+).

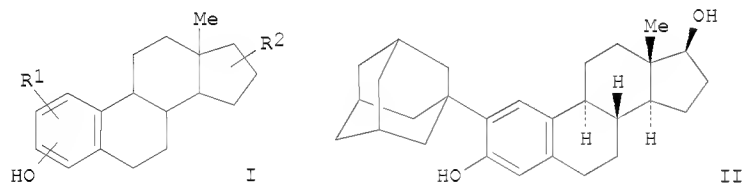
McIntosh



RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 9 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2007:618644 CAPLUS  
DN 147:31277  
TI Polycyclic phenolic compounds and use in treating viral infections  
IN Dugourd, Dominique  
PA Migenix Corporation, Can.  
SO PCT Int. Appl., 77pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007062528	A1	20070607	WO 2006-CA1965	20061201
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	US 20070161611	A1	20070712	US 2006-565621	20061130
PRAI	US 2005-742058P	P	20051201		
	US 2006-565621	A	20061130		
OS	MARPAT 147:31277				
GI					



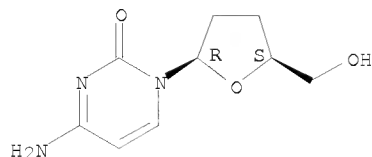
AB The present invention provides antiviral polycyclic phenolic compds. (PPCs) of formula I [R1 = H, alkyl, aryl, cycloalkyl, etc.; R2 = H, OH, acyl, oxo, = (substituted) NH, SH, etc.] for use in treating or preventing viral infections and associated conditions, such as infections by Flaviviridae, Hepadnaviridae, Herpesviridae, Papillomaviridae, Retroviridae, Adenoviridae, or respiratory viruses (such as Adenoviridae, Orthomyxoviridae, Paramyxoviridae and Coronaviridae). Thus, II was prepared from estrone and 1-adamantanol, and inhibited viral release by 69% in BVDV-infected MDBK cells.

IT 7481-89-2, Zalcitabine  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (co-drug; estrone derivs. for treatment of viral infections)

RN 7481-89-2 CAPLUS  
CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

10045292



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 10 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:485141 CAPLUS

DN 146:468577

TI Anti-mineralocorticoid therapy of infection

IN Prendergast, Patrick T.

PA Prendergast, Patrick, T., Australia

SO PCT Int. Appl., 53 pp.

CODEN: PIXXD2

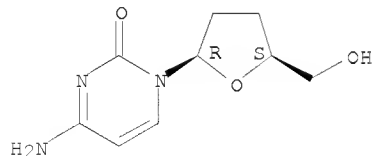
DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007049265	A2	20070503	WO 2006-IE124	20061031
	WO 2007049265	A3	20080124		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			
	CA 2627463	A1	20070503	CA 2006-2627463	20061031
	EP 1940414	A2	20080709	EP 2006-809736	20061031
	R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS			
PRAI	IE 2005-723	A	20051028		
	WO 2006-IE124	W	20061031		
OS	MARPAT 146:468577				
AB	Antimineralocorticoid compds. are disclosed for use in the prophylaxis and therapy of viral infections, especially the retroviral infection by HIV. These compds. can be administered alone or in combination with conventional anti-viral agents or anti-sense mineralocorticoid steroid receptor or DNA mutants of heat shock proteins.				
IT	7481-89-2, Zalcitabine				
	RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (anti-mineralocorticoid therapy of infection)				
RN	7481-89-2 CAPLUS				
CN	Cytidine, 2',3'-dideoxy- (CA INDEX NAME)				

Absolute stereochemistry. Rotation (+).



L13 ANSWER 11 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:150669 CAPLUS

DN 146:229612

McIntosh

TI Preparation of macrocyclic carboxylic acids, amides, and acylsulfonamides  
as inhibitors of HCV replication  
IN Seiwert, Scott D.; Blatt, Lawrence M.; Andrews, Steven W.; Martin, Pierre;  
Schumacher, Andreas; Barnett, Bradley R.; Eary, Todd C.; Kaus, Robert;  
Kercher, Timothy; Liu, Weidong; Lyon, Michael; Nichols, Paul; Wang, Bin;  
Sammakia, Tarek; Kennedy, April; Jiang, Yutong  
PA Intermune, Inc., USA; Array Biopharma Inc.  
SO PCT Int. Appl., 512pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007015824	A2	20070208	WO 2006-US27738	20060717
	WO 2007015824	A3	20070719		
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,				
	CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,				
	GE, GH, GM, GN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,				
	KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN,				
	MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU,				
	SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG,				
	US, UZ, VC, VN, ZA, ZM, ZW				
	RW:				
	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,				
	IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,				
	CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,				
	GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,				
	KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
AU	2006276246	A1	20070208	AU 2006-276246	20060717
CA	2615666	A1	20070208	CA 2006-2615666	20060717
EP	1924594	A2	20080528	EP 2006-800088	20060717
	R:				
	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,				
	IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,				
	BA, HR, MK, RS				
US	20070054842	A1	20070308	US 2006-491126	20060721
MX	200801166	A	20080318	MX 2008-1166	20080124
IN	2008DN01510	A	20080620	IN 2008-DN1510	20080221
KR	2008039434	A	20080507	KR 2008-704379	20080222
PRAI	US 2005-702195P	P	20050725		
	US 2005-725533P	P	20051011		
	US 2006-789800P	P	20060406		
	WO 2006-US27738	W	20060717		
OS	CASREACT 146:229612; MARPAT 146:229612				
GI					

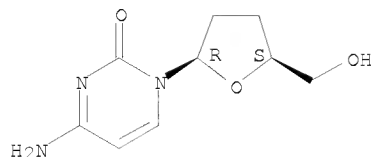
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to macrocyclic compds. I and analogs [R1 = H, OC(:O)R1; R1 = (un)substituted N-heteroaryl; R2 = OH, NHR5; R5 = Ph, alkyl, CN, cyclopropylcarbonyl, etc.; R3 = H, CH2R6, CSNH2, (un)substituted thiazol-2-yl, etc.; R6 = CF3, t-Bu, (un)substituted Ph, cyclopropyl, furanyl, etc.; R4 = H, cyclopropylmethyl; the dashed line represents an optional double bond], and their pharmaceutically acceptable salts, prodrugs, and esters for use in pharmaceutical compns. for the treatment of hepatitis C virus (HCV) infection and liver fibrosis. Thus, compound II, prepared by reaction of the macrocyclic prolinol derivative with CDI in the presence of DCE and treatment with 1-methylcyclopropane-1-sulfonamide in the presence of DBU, showed IC50 < 0.1  $\mu$ M in the NS3-NS4 protease inhibition assay.

IT 7481-89-2, 2' 3' Dideoxycytidine  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(combination therapy agent; preparation of macrocyclic carboxylic acids, amides and acylsulfonamides as inhibitors of HCV replication)  
RN 7481-89-2 CAPLUS  
CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

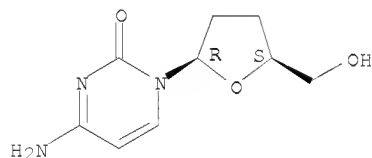
10045292



L13 ANSWER 12 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2007:61511 CAPLUS  
DN 146:161493  
TI Eliciting immune responses to escape mutants of targeted therapies  
IN Apelian, David; Franzusoff, Alex; Rodell, Timothy C.  
PA Globeimmune, Inc., USA  
SO PCT Int. Appl., 83pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007008780	A2	20070118	WO 2006-US26710	20060710
WO 2007008780	A3	20070322		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2006268333	A1	20070118	AU 2006-268333	20060710
CA 2614884	A1	20070118	CA 2006-2614884	20060710
EP 1906997	A2	20080409	EP 2006-786760	20060710
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
KR 2008043775	A	20080519	KR 2008-703088	20080205
PRAI US 2005-698381P	P	20050711		
WO 2006-US26710	W	20060710		
AB The authors disclose yeast cells vector and drug resistant mutant polypeptides (or mimotopes) derived from tumors or viruses for use in eliciting an immune response to the mutant.				
IT 7481-89-2, Zalcitabine				
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (yeast vectors for eliciting immune responses to protein mutants mediating resistance to)				
RN 7481-89-2	CAPLUS			
CN Cytidine, 2',3'-dideoxy-	(CA INDEX NAME)			

Absolute stereochemistry. Rotation (+).



L13 ANSWER 13 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2006:1310700 CAPLUS  
DN 146:68682  
TI Methods for treating viral infection with oral or injectable drug solution  
IN Kim, Jong Joseph; Matharu, Rajinder  
PA VGX Pharmaceuticals, Inc, USA

McIntosh



10045292

SO PCT Int. Appl., 42pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006133194	A2	20061214	WO 2006-US21923	20060606
	WO 2006133194	A3	20070607		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			

PRAI US 2005-687813P P 20050606

AB Pharmaceutical composition comprising compds. and/or composition useful to inhibit viral replication are disclosed. The compns., suitable for oral or injectable delivery, comprise glucocorticoid receptor antagonists and optionally other antiviral agents, e.g., mifepristone, zidovudine, abacavir, 3TC, etc., and polyethylene glycol as a carrier. The compds. are used at dosage levels effective in treating and/or preventing human immunodeficiency virus (HIV), hepatitis C virus (HCV) or herpes simplex virus (HSV) infections.

IT 7481-89-2, 2',3'-Dideoxycytidine

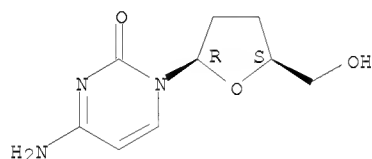
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(oral or injectable solns. of glucocorticoid receptor antagonists and other antiviral agents for treating and/or preventing viral infections)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 14 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:1261770 CAPLUS

DN 144:7097

TI Preparation of macrocyclic carboxylic acid derivatives as inhibitors of HCV replication

IN Blatt, Lawrence M.; Andrews, Steven W.; Condroski, Kevin R.; Doherty, George A.; Jiang, Yutong; Josey, John A.; Kennedy, April L.; Madduru, Machender R.; Stengel, Peter J.; Wenglowky, Steven M.; Woodard, Benjamin T.; Woodard, Laura

PA USA

SO U.S. Pat. Appl. Publ., 228 pp., Cont.-in-part of U.S. Ser. No. 64,445.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20050267018	A1	20051201	US 2005-93884	20050329
	WO 2005037214	A2	20050428	WO 2004-US33970	20041013
	WO 2005037214	A3	20051103		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,			

McIntosh

NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,  
 TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,  
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
 SN, TD, TG

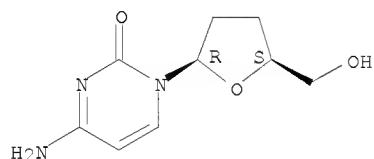
PRAI US 2003-511541P P 20031014  
 US 2004-558161P P 20040330  
 US 2004-562418P P 20040414  
 US 2004-612381P P 20040922  
 US 2004-612460P P 20040922  
 WO 2004-US333970 A1 20041013  
 US 2005-64445 A2 20050223  
 OS MARPAT 144:7097  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to macrocyclic compds., e.g., I [Q is (un)substituted 2-isoindolinyl, 2-isoquinolinyl, 1-benzoazetidiny, 1-indolinyl, (3,4-dehydro)pyrrolidino, (3,4-dehydro)piperidino or Q is R3-R4, where R3 is alkyl, cycloalkyl, alkylcycloalkyl, Ph, pyridyl and other heterocyclic groups and R4 is H, Ph, pyridyl and other heterocyclic groups; V is O, S, NH; W is O, NR5 or CR5, where R5 is H, alkyl, fluoroalkyl, cycloalkyl, alkylcycloalkyl; Y is a sulfonimide CONHSO2R6, where R6 is (un)substituted alkyl, fluoroalkyl, cycloalkyl, alkylcycloalkyl, aryl, heteroaryl or (un)substituted phenyl; or Y is carboxy or a pharmaceutically-acceptable salt or prodrug; R1 is H, (un)substituted alkyl, cycloalkyl, alkylcycloalkyl, Ph or benzyl; R2 is H, alkyl, (thio)carbonyl, acyl, or sulfonyl group; the dashed line represents an optional double bond], for use in pharmaceutical compns. for the treatment of hepatitis C virus (HCV) infection and liver fibrosis. Thus, compound II, prepared by reaction of the macrocyclic prolinol derivative with CDI and 4-fluoro-2,3-dihydro-1H-isoindole, showed IC50 and EC50 < 0.1  $\mu$ M in the NS3-NS4A protease inhibition assay and did not display toxicity in Rattus sp. when dosed for seven days at 30 mg/kg BID, providing at least a 10-fold safety margin above the presumptive efficacious dose (3 mg/kg) that yields liver concns. 100-fold in excess of the replicon EC50 value of the compound

IT 7481-89-2  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (preparation of macrocyclic carboxylic acid derivs. as inhibitors of HCV replication)  
 RN 7481-89-2 CAPLUS  
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 15 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2005:1106860 CAPLUS  
 DN 143:367596  
 TI Preparation of macrocyclic carboxylic acids or sulfonamides as inhibitors of HCV replication  
 IN Blatt, Lawrence M.; Wenglow, Steven M.; Andrews, Steven W.; Condroski, Kevin R.; Jiang, Yutong; Kennedy, April L.; Doherty, George A.; Josey, John A.; Stengel, Peter J.; Woodard, Benjamin T.; Madduru, Machender R.  
 PA Intermune, Inc., USA  
 SO PCT Int. Appl., 444 pp.  
 CODEN: PIXXD2

10045292

DT Patent  
LA English  
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005095403	A2	20051013	WO 2005-US10494	20050329
	WO 2005095403	A3	20051201		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2005228894	A1	20051013	AU 2005-228894	20050329
	CA 2560897	A1	20051013	CA 2005-2560897	20050329
	EP 1749007	A2	20070207	EP 2005-757750	20050329
	R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU			
	CN 1938311	A	20070328	CN 2005-80010503	20050329
	BR 2005009467	A	20070911	BR 2005-9467	20050329
	JP 2007531749	T	20071108	JP 2007-506466	20050329
	MX 2006PA11268	A	20061129	MX 2006-PA11268	20060929
	NO 2006004933	A	20061215	NO 2006-4933	20061027
	IN 2006DN06333	A	20070831	IN 2006-DN6333	20061027
	KR 2007016137	A	20070207	KR 2006-722763	20061030
PRAI	US 2004-558161P	P	20040330		
	US 2004-562418P	P	20040414		
	US 2004-612381P	P	20040922		
	US 2004-612460P	P	20040922		
	WO 2005-US10494	W	20050329		
OS	MARPAT 143:367596				
GI					

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

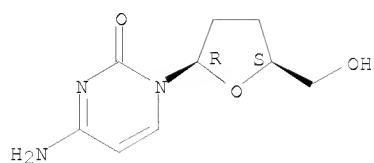
AB The invention relates to macrocyclic compds., e.g., I [Q is (un)substituted 2-isoindolinyl, 2-isoquinolinyl, 1-benzoazetidiny, 1-indolinyl, (3,4-dehydro)pyrrolidino, (3,4-dehydro)piperidino or Q is R3-R4, where R3 is alkyl, cycloalkyl, alkylcycloalkyl, Ph, pyridyl and other heterocyclic groups and R4 is H, Ph, pyridyl and other heterocyclic groups; V is O, S, NH; W is O, NR5 or CR5, where R5 is H, alkyl, fluoroalkyl, cycloalkyl, alkylcycloalkyl; Y is a sulfonimide CONHSO2R6, where R6 is (un)substituted alkyl, fluoroalkyl, cycloalkyl, alkylcycloalkyl, aryl, heteroaryl or (un)substituted phenyl; or Y is carboxy or a pharmaceutically-acceptable salt or prodrug; R1 is H, (un)substituted alkyl, cycloalkyl, alkylcycloalkyl, Ph or benzyl; R2 is H, alkyl, (thio)carbamoyl, acyl, or sulfonyl group; the dashed line represents an optional double bond], for use in pharmaceutical compns. for the treatment of flaviviral or hepatitis C virus (HCV) infection and liver fibrosis. Thus, compound II, prepared by reaction of the macrocyclic prolinol derivative with CDI and 4-fluoro-2,3-dihydro-1H-isoindole, showed IC50 and EC50 < 0.1 µM in the NS3-NS4A protease inhibition assay and did not display toxicity in Rattus sp. when dosed for seven days at 30 mg/kg BID, providing at least a 10-fold safety margin above the presumptive efficacious dose (3 mg/kg) that yields liver concns. 100-fold in excess of the replicon EC50 value of the compound

IT 7481-89-2  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(preparation of macrocyclic carboxylic acids or sulfonamides as inhibitors of HCV replication)

RN 7481-89-2 CAPLUS  
CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

McIntosh



L13 ANSWER 16 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:371064 CAPLUS

DN 142:430532

TI Preparation of macrocyclic carboxylic acids and acylsulfonamides as inhibitors of HCV replication

IN Blatt, Lawrence M.; Wenglowsky, Steven Mark; Andrews, Steven Wade; Jiang, Yutong; Kennedy, April Layne; Condroski, Kevin Ronald; Josey, John Anthony; Stengel, Peter John; Madduru, Machender R.; Doherty, George Andrew; Woodard, Benjamin T.

PA Intermune, Inc., USA; Array Biopharma Inc.

SO PCT Int. Appl., 244 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005037214	A2	20050428	WO 2004-US33970	20041013
	WO 2005037214	A3	20051103		
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2004281780	A1	20050428	AU 2004-281780	20041013
	CA 2540858	A1	20050428	CA 2004-2540858	20041013
	EP 1680137	A2	20060719	EP 2004-795169	20041013
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	BR 2004015373	A	20061212	BR 2004-15373	20041013
	CN 1889970	A	20070103	CN 2004-80035412	20041013
	JP 2007533642	T	20071122	JP 2006-535671	20041013
	US 20050267018	A1	20051201	US 2005-93884	20050329
	MX 2006PA03963	A	20060825	MX 2006-PA3963	20060407
	KR 2007033315	A	20070326	KR 2006-707146	20060413
	KR 853579	B1	20080821		
	IN 2006DN02245	A	20070803	IN 2006-DN2245	20060424
	NO 2006002089	A	20060509	NO 2006-2089	20060509
PRAI	US 2003-511541P	P	20031014		
	US 2004-612460P	P	20040922		
	US 2004-558161P	P	20040330		
	US 2004-562418P	P	20040414		
	US 2004-612381P	P	20040922		
	WO 2004-US33970	W	20041013		
	US 2005-64445	A2	20050223		
OS	CASREACT 142:430532; MARPAT 142:430532				
GI					

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to macrocyclic compds., e.g., tetrahydroisoquinolinecarboxylic acid derivs. I [R1, R2 are independently H, halo, cyano, hydroxy, alkyl, alkoxy; R5 is a carbamoyl, acyl or carboxy

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ester; Y is a sulfonimide CONHSO<sub>2</sub>R<sub>9</sub>, where R<sub>9</sub> is alkyl, cycloalkyl or (un)substituted phenyl; or Y is carboxylic acid or pharmaceutically-acceptable salt or prodrug; R<sub>10</sub>, R<sub>11</sub> are independently H or alkyl or CRIOR<sub>11</sub> is cyclopropyl, cyclobutyl, cyclopentyl or cyclohexyl; W is O or NH; the dashed line represents an optional double bond], for use in pharmaceutical compns. for the treatment of hepatitis C virus (HCV) infection and liver fibrosis. Thus, compound II, prepared by reaction of the macrocyclic prolinol derivative with CDI and 4-fluoro-2,3-dihydro-1H-isoindole, showed IC<sub>50</sub> and EC<sub>50</sub> < 0.1  $\mu$ M in the NS3-NS4A protease inhibition assay and did not display toxicity in Rattus sp. when dosed for seven days at 30 mg/kg BID, providing at least a 10-fold safety margin above the presumptive efficacious dose (3 mg/kg) that yields liver concns. 100-fold in excess of the replicon EC<sub>50</sub> value of the compound

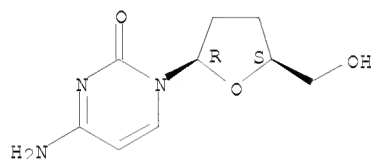
IT 7481-89-2, 2' 3' Dideoxycytidine

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(preparation of macrocyclic carboxylic acids and acylsulfonamides as inhibitors of HCV replication)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 17 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:185375 CAPLUS

DN 142:254563

TI Antimetabolite antiviral dosing regimen for hepatitis C virus or flaviviridae therapy

IN Stuyver, Lieven J.

PA Belg.

SO U.S. Pat. Appl. Publ., 23 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20050049220	A1	20050303	US 2004-921052	20040818
PRAI	US 2003-496202P	P	20030818		

AB An anti-hepatitis C agent which is an antimetabolite to the host and cannot be administered on a daily or chronic basis as is usual in antiviral therapy (referred to below as an "anti-HCV antimetabolite"), can be administered using a traditional anticancer dosing regimen (for example via i.v. or parenteral injection), over a period of 1-7 days followed by cessation of therapy until rebound of the viral load is noted. This dosing regimen runs counter to conventional antiviral experience, wherein effective agents are usually administered over at least fourteen days of sustained therapy, and typically on an indefinite daily basis.

IT 7481-89-2, Zalcitabine

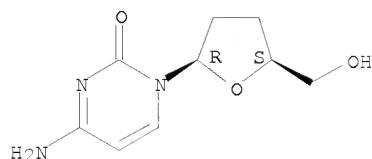
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(antimetabolite antiviral dosing regimen for hepatitis C virus or flaviviridae therapy)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

10045292

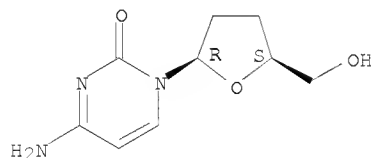


L13 ANSWER 18 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:177803 CAPLUS  
DN 142:254560  
TI Antimetabolite antiviral dosing regimen for hepatitis C virus or  
flaviviridae therapy  
IN Stuyver, Lieven J.  
PA Pharmasset, Inc., USA  
SO PCT Int. Appl., 61 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005018330	A1	20050303	WO 2004-US26686	20040817
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRAI US 2003-496202P P 20030818  
AB An anti-hepatitis C agent which is an anti-metabolite to the host and cannot be administered on a daily or chronic basis as is usual in anti-viral therapy (referred to below as an "anti-HCV anti-metabolite"), can be administered using a traditional anti-cancer dosing regimen (for example via i.v. or parenteral injection), over a period of 1-7 days followed by cessation of therapy until rebound of the viral load is noted. This dosing regimen runs counter to conventional antiviral experience, wherein effective agents are usually administered over at least fourteen days of sustained therapy, and typically on an indefinite daily basis.  
IT 7481-89-2, Zalcitabine  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(antimetabolite antiviral dosing regimen for hepatitis C virus or flaviviridae therapy)  
RN 7481-89-2 CAPLUS  
CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 19 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:136552 CAPLUS  
DN 142:233276  
TI Use of indomethacin and indomethacin derivatives as broad-spectrum

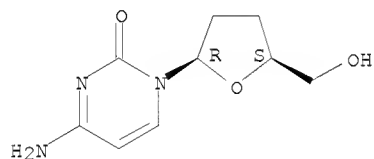
McIntosh

10045292

antiviral drugs, and corresponding pharmaceutical compositions.  
IN Santoro, Maria Gabriella  
PA Universita' Degli Studi di Roma 'tor Vergata', Italy  
SO PCT Int. Appl., 24 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005013980	A1	20050217	WO 2004-EP51773	20040811
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2535448	A1	20050217	CA 2004-2535448	20040811
	EP 1660078	A1	20060531	EP 2004-766476	20040811
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
	US 20060229356	A1	20061012	US 2006-568071	20060405
PRAI	IT 2003-RM394	A	20030812		
	WO 2004-EP51773	W	20040811		
AB	The invention discloses the use of indomethacin (INDO) and its derivs. and salts as antiviral drugs, since it was found that INDO is able to stimulate an antiviral defense response in cells attacked by viruses. This antiviral response has been found in the presence of INDO alone and/or in combination with other compds., for instance with metals and metal-containing compds., Prostanoids and antiviral drugs. In combination with these compds. INDO develops an unexpected as well as effective synergic antiviral action.				
IT	7481-89-2, DDC RL: AGR (Agricultural use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (indomethacin and derivs. as broad-spectrum antiviral drugs, pharmaceutical compds., and combinations with other agents)				
RN	7481-89-2 CAPLUS				
CN	Cytidine, 2',3'-dideoxy- (CA INDEX NAME)				

Absolute stereochemistry. Rotation (+).



RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 20 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2004:703121 CAPLUS  
DN 141:207236  
TI Preparation of 1,1-dioxido-4H-1,2,4-benzothiadiazines as hepatitis C polymerase inhibitors and anti-infective agents  
IN Pratt, John K.; Betebenner, David A.; Donner, Pamela L.; Green, Brian E.; Kempf, Dale J.; McDaniel, Keith F.; Maring, Clarence J.; Stoll, Vincent S.; Zhang, Rong  
PA USA  
SO U.S. Pat. Appl. Publ., 278 pp.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 1

McIntosh

10045292

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20040167123	A1	20040826	US 2003-699513	20031031
PRAI	US 2002-423209P	P	20021101		
	US 2003-461784P	P	20030410		
	US 2003-489448P	P	20030723		
	US 2003-509107P	P	20031006		
OS	MARPAT 141:207236				
GI					

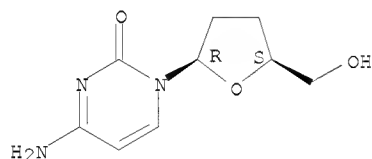
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [wherein A = monocyclic or bicyclic ring selected from hetero/aryl, cycloalkyl, cycloalkenyl, heterocyclyl; R1 = H, (un)substituted cycloalkyl/cyclo/alkenyl, alkoxy-carbonyl/alkoxy/aryl/aryls ulfonyl/arylsulfanyl/carboxy/cyano/heteroaryl/alkyl, heterocyclyl, etc.; R2, R3 = independently H, cyano, halo, (un)substituted alkenyl, alkoxy-carbonyl, alkyl, heteroaryl, etc.; CR2R3C = 5- or 6-membered ring selected from Ph, pyridinyl, pyrimidinyl, pyridazinyl, thienyl, furanyl, pyrazolyl, oxazolyl, thiazolyl, imidazolyl, isoxazolyl, isothiazolyl, triazolyl, thiadiazolyl, tetrazolyl, cyclopentyl, and cyclohexyl; R4 = OH and derivs., halo, NH2 and derivs., etc.; R5 = independently CN, NO2, (un)substituted alk(en/yn)yl, hetero/aryl, arylsulfonyl, heterocyclyl etc.; n = 0-4; their pharmaceutically acceptable salts, stereoisomers, or tautomers] were prepared as hepatitis C (HCV) polymerase inhibitors for treating related infections. Thus II was prepared by alkylation of III (preparation given) with tris(methylthio)methyl Me sulfate in AcOH, cyclization with 2-amino-4[(4-methoxymethoxy)methyl]thiophene-3-sulfonamide, deprotection, condensation with cyclopropanecarboxaldehyde, reduction with LiBH4. I inhibited HCV polymerase with IC50's in the range of 0.002  $\mu$ M to 500  $\mu$ M. I inhibited RNA replication with EC50 in the range of 0.002  $\mu$ M to > 100  $\mu$ M. I exhibited a cytopathic effect reduction with TC50's in the range of 6.6  $\mu$ M to > 100  $\mu$ M.

IT 7481-89-2, Zalcitabine  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (combination therapy; preparation of 1,1-dioxidobenzothiadiazines as hepatitis C polymerase inhibitors and anti-infective agents)

RN 7481-89-2 CAPLUS  
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 21 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2004:701799 CAPLUS  
 DN 141:225774  
 TI Preparation of 2',3'-dideoxy and 2',3'-didehydro nucleoside analogs as prodrugs for treating viral infections, most notably HIV  
 IN Cheng, Yung-chi; Tanaka, Hiromichi; Baba, Masanori  
 PA USA  
 SO U.S. Pat. Appl. Publ., 45 pp.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20040167096	A1	20040826	US 2004-781305	20040218
	AU 2004260630	A1	20050210	AU 2004-260630	20040218
	CA 2514466	A1	20050210	CA 2004-2514466	20040218
	WO 2005011709	A1	20050210	WO 2004-US4713	20040218

McIntosh



W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

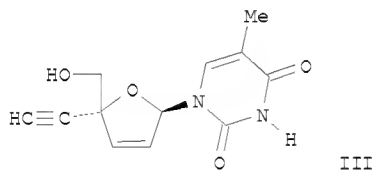
BR 2004007374 A 20060110 BR 2004-7374 20040218  
 EP 1653976 A1 20060510 EP 2004-775776 20040218

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

CN 1777432 A 20060524 CN 2004-80010529 20040218  
 JP 2006528972 T 20061228 JP 2006-532288 20040218  
 IN 2005KN01553 A 20061027 IN 2005-KN1553 20050805  
 MX 2005PA08736 A 20051005 MX 2005-PA8736 20050817  
 ZA 2005006630 A 20060628 ZA 2005-6630 20050818

PRAI US 2003-448554P P 20030219  
 WO 2004-US4713 W 20040218

OS CASREACT 141:225774; MARPAT 141:225774  
 GI

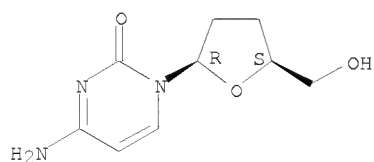


AB Nucleosides I, wherein B is nucleobase; Z is O or CH<sub>2</sub>; R is H, OH, halo, alkyl substituents; R<sub>1</sub> can be H, Me, alkenyl, alkynyl; R<sub>2</sub> is H, acyl, alkyl, ether, phosphoethers; and 2',3'-didehydro nucleosides II where Z is O; and R<sub>3</sub> can alkyl, alkenyl, alkynyl, halo, hydroxy, were prepared as prodrugs and antiviral agents. Thus, the synthesized 2',3'-dideoxy and didehydro nucleoside analogs were tested as potential antiviral, anti-HIV and anti-infective prodrugs as independent agents, or in combination with other agents. Specifically, didehydro nucleoside III was prepared and tested in vitro as potent anti-HIV-1 agent (EC<sub>50</sub> = 0.25 ± 0.14) and as well less toxic (ID<sub>50</sub> >256) as D4T, therefor has the potential as a new anti-HIV drug.

IT 7481-89-2, DdC 107036-62-4 147058-39-7  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (synthesis of 2',3'-dideoxy and didehydro nucleoside analog and their evaluation as antiviral, anti-HIV and anti-infective prodrugs)

RN 7481-89-2 CAPLUS  
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

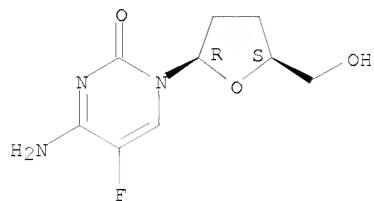
Absolute stereochemistry. Rotation (+).



10045292

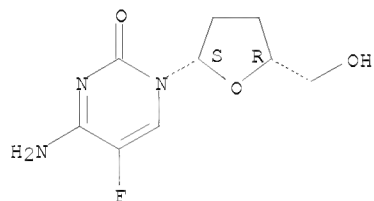
RN 107036-62-4 CAPLUS  
CN Cytidine, 2',3'-dideoxy-5-fluoro- (CA INDEX NAME)

Absolute stereochemistry.



RN 147058-39-7 CAPLUS  
CN 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L13 ANSWER 22 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2004:453332 CAPLUS  
DN 141:17577  
TI Concurrent inhibiting viral replication and treating cancer by pegylated arginine deiminase, and methods for determining the sensitivity to arginine deprivation therapy  
IN Clark, Mike A.  
PA Phoenix Pharmacologics, Inc., USA  
SO PCT Int. Appl., 89 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004046309	A2	20040603	WO 2003-US30770	20030929
	WO 2004046309	A3	20050804		
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2506244	A1	20040603	CA 2003-2506244	20030929
	AU 2003282883	A1	20040615	AU 2003-282883	20030929
	US 20040131604	A1	20040708	US 2003-674666	20030929
	US 7204980	B2	20070417		
	EP 1599217	A2	20051130	EP 2003-774504	20030929
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2006515281	T	20060525	JP 2004-553429	20030929
	CN 1809378	A	20060726	CN 2003-825264	20030929
	US 20070172469	A1	20070726	US 2007-689166	20070321
PRAI	US 2002-427497P	P	20021118		
	US 2003-674666	A1	20030929		

McIntosh

WO 2003-US30770 W 20030929

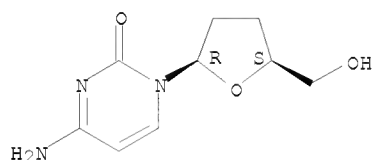
AB The present invention is directed to methods of modulating viral replication comprising administering to a patient arginine deiminase (ADI) bonded to polyethylene glycol (PEG). The present invention is also directed to methods of concurrently modulating viral replication and treating cancer, including, for example, sarcomas, hepatomas and melanomas. The present invention is also directed to methods of determining the susceptibility of an individual to arginine deprivation therapy for a viral infection, methods for improving liver function, and the like.

IT 7481-89-2, Zalcitabine  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (dideoxycytosine, co-treatment with; concurrent inhibiting viral replication and treating cancer by pegylated arginine deiminase, and methods for determining sensitivity to arginine deprivation therapy)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 23 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:412943 CAPLUS

DN 140:423711

TI Preparation of 1,1-dioxido-4H-1,2,4-benzothiadiazines as hepatitis C polymerase inhibitors and anti-infective agents

IN Pratt, John K.; Betebenner, David A.; Donner, Pamela L.; Green, Brian E.; Kempf, Dale J.; McDaniel, Keith F.; Maring, Clarence J.; Stoll, Vincent S.; Zhang, Rong

PA Abbott Laboratories, USA

SO PCT Int. Appl., 514 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 4

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004041818	A1	20040521	WO 2003-US34707	20031031
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, CH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 20040097492	A1	20040520	US 2002-285714	20021101
US 20040087577	A1	20040506	US 2003-410853	20030410
US 20040162285	A1	20040819	US 2003-625121	20030723
US 20050075331	A1	20050407	US 2003-679881	20031006
CA 2504385	A1	20040521	CA 2003-2504385	20031031
AU 2003291670	A1	20040607	AU 2003-291670	20031031
EP 1560827	A1	20050810	EP 2003-768559	20031031
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
JP 2006509042	T	20060316	JP 2005-502238	20031031
BR 2003015897	A	20080513	BR 2003-15897	20031031
MX 2005PA04670	A	20050818	MX 2005-PA4670	20050429
IN 2005MN00522	A	20050930	IN 2005-MN522	20050531
PRAI US 2002-285714	A	20021101		
US 2003-410853	A	20030410		
US 2003-625121	A	20030723		
US 2003-679881	A	20031006		

WO 2003-US34707 W 20031031  
OS MARPAT 140:423711  
GI

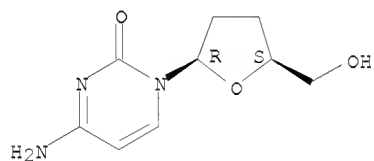
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [wherein A = monocyclic or bicyclic ring selected from hetero/aryl, cycloalkyl, cycloalkenyl, heterocyclyl; R1 = H, (un)substituted cycloalkyl/cyclo/alkenyl, alkoxy carbonyl/alkoxy/aryl/arylsulfonyl/arylsulfanyl/carboxy/cyano/heteroaryl/alkyl, heterocyclyl, etc.; R2, R3 = independently H, cyano, halo, (un)substituted alkenyl, alkoxy carbonyl, alkyl, heteroaryl, etc.; CR2R3C = 5- or 6-membered ring selected from Ph, pyridinyl, pyrimidinyl, pyridazinyl, thienyl, furanyl, pyrazolyl, oxazolyl, thiazolyl, imidazolyl, isoxazolyl, isothiazolyl, triazolyl, thiadiazolyl, tetrazolyl, cyclopentyl, and cyclohexyl; R4 = OH and derivs., halo, NH2 and derivs., etc.; R5 = independently CN, NO2, (un)substituted alk(en/yn)yl, hetero/aryl, arylsulfonyl, heterocyclyl etc.; n = 0-4; their pharmaceutically acceptable salts, stereoisomers, or tautomers] were prepared as hepatitis C (HCV) polymerase inhibitors for treating related infections. Thus II was prepared by alkylation of III (preparation given) with tris(methylthio)methyl Me sulfate in AcOH, cyclization with 2-amino-4[(4-methoxymethoxy)methyl]thiophene-3-sulfonamide, deprotection, condensation with cyclopropanecarboxaldehyde, reduction with LiBH4. I inhibited HCV polymerase with IC50's in the range of 0.002  $\mu$ M to 500  $\mu$ M. I inhibited RNA replication with EC50 in the range of 0.002  $\mu$ M to > 100  $\mu$ M. I exhibited a cytopathic effect reduction with TC50's in the range of 6.6  $\mu$ M to > 100  $\mu$ M.

II 7481-89-2, Zalcitabine  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(combination therapy; preparation of 1,1-dioxidobenzothiadiazines as hepatitis C polymerase inhibitors and anti-infective agents)

RN 7481-89-2 CAPLUS  
CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

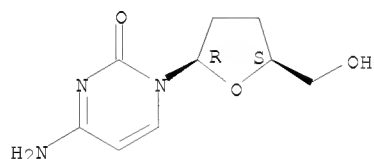


L13 ANSWER 24 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2004:332156 CAPLUS  
DN 140:399402  
TI Depletion of mitochondrial DNA in liver under antiretroviral therapy with didanosine, stavudine, or zalcitabine  
AU Walker, Ulrich A.; Baeuerle, Jochen; Laguno, Montse; Murillas, Javier; Mauss, Stefan; Schmutz, Guenther; Setzer, Bernhard; Miquel, Rosa; Gatell, Jose M.; Mallolas, Josep  
CS Department of Clinical Immunology, Medizinische Universitaetsklinik, Freiburg, Germany  
SO Hepatology (Hoboken, NJ, United States) (2004), 39(2), 311-317  
CODEN: HPTLDD; ISSN: 0270-9139  
PB John Wiley & Sons, Inc.  
DT Journal  
LA English  
AB The "D drug" HIV reverse-transcriptase inhibitors zalcitabine, didanosine, and stavudine are relatively strong inhibitors of polymerase-gamma compared with the "non-D drugs" zidovudine, lamivudine, and abacavir. D drugs deplete mitochondrial DNA (mtDNA) in cultured hepatocytes. This mtDNA depletion is associated with an increased in vitro production of lactate. To investigate the origin of hyperlactatemia in HIV-infected patients and the effects of antiretroviral therapy on liver mtDNA, we biopsied liver tissue from 94 individuals with chronic hepatitis C virus (HCV) infection. Eighty subjects were coinfectd with HIV. Serum lactate was

measured at the time of biopsy. Hepatic mtDNA and liver histol. were centrally assessed. Liver mtDNA content of HIV-infected patients receiving D drugs at the time of biopsy (n = 34) was decreased by 47% (P<.0001) compared with those without D drugs (n = 35). Aside from a possible association between HCV genotype 1 status and mtDNA depletion in multivariate anal., there were no other virol., immunol., histol., demog. or treatment-related variables that could explain the mtDNA depletion. Lactate was above the upper limit of normal in only three patients, all of whom were treated with D drugs. The mtDNA in each of them was lower than in any non-D drug patient and significantly (P = .017) depleted compared with D drug patients with normal lactate. In conclusion, D drug treatment is associated with decreased hepatic mtDNA in HIV-infected patients with chronic HCV infection. Moderate mtDNA depletion in liver does not necessarily lead to hyperlactatemia, but more pronounced decreases in hepatic mtDNA may be an important contributor to lactate elevation.

IT 7481-89-2, Zalcitabine  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (depletion of mitochondrial DNA in liver under antiretroviral therapy with didanosine, stavudine, or zalcitabine)  
 RN 7481-89-2 CAPLUS  
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 25 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2004:120958 CAPLUS  
 DN 140:157421  
 TI 2',3'-dideoxynucleoside analogs for the treatment or prevention of  
 flaviviridae infections  
 IN Shi, Junxing; Schinazi, Raymond F.; Striker, Robert  
 PA Pharmasset Ltd., Barbados; Emory University; Board of Trustees of the  
 Leland Stanford Junior University  
 SO PCT Int. Appl., 86 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004013298	A2	20040212	WO 2003-US24288	20030801
	WO 2004013298	A3	20040401		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2003263978	A1	20040223	AU 2003-263978	20030801
	US 20040067877	A1	20040408	US 2003-632875	20030801
PRAI	US 2002-453715P	P	20020801		
	US 2002-453716P	P	20020801		
	WO 2003-US24288	W	20030801		

OS MARPAT 140:157421

AB A method for the treatment or prevention of flaviviridae infections, in particular, hepatitis C virus infection, in a host, and in

10045292

particular, a human, is provided that includes administering an effective amount of a 2',3'-dideoxynucleoside or a pharmaceutically acceptable salt or prodrug thereof, optionally in a pharmaceutically acceptable diluent or excipient. Preparation of compds. of the invention is included.

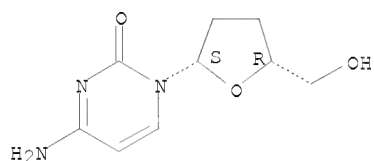
IT 121154-51-6P 147058-39-7P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(dideoxynucleoside analog preparation for treatment or prevention of flaviviridae infections)

RN 121154-51-6 CAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

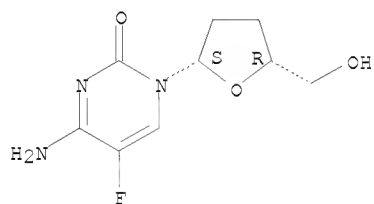
Absolute stereochemistry. Rotation (-).



RN 147058-39-7 CAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT 107036-57-7 121154-51-6D, derivs. 147058-39-7D

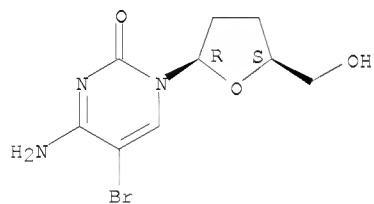
, derivs. 160963-15-5 160963-16-6 161170-31-6

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(dideoxynucleoside analog preparation for treatment or prevention of flaviviridae infections)

RN 107036-57-7 CAPLUS

CN Cytidine, 5-bromo-2',3'-dideoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



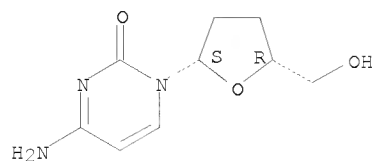
RN 121154-51-6 CAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

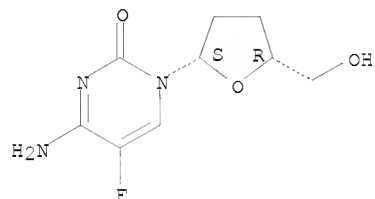
McIntosh

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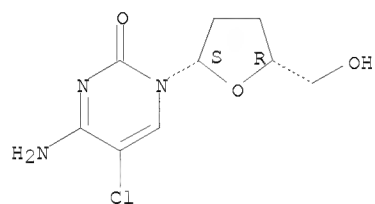
RN 147058-39-7 CAPLUS  
CN 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



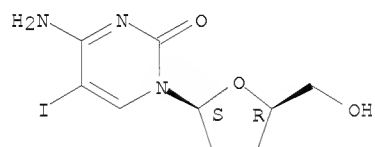
RN 160963-15-5 CAPLUS  
CN 2(1H)-Pyrimidinone, 4-amino-5-chloro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



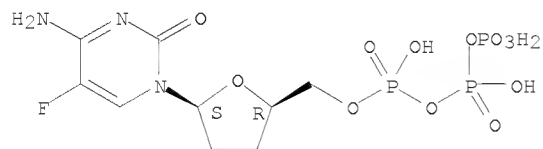
RN 160963-16-6 CAPLUS  
CN 2(1H)-Pyrimidinone, 4-amino-5-iodo-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 161170-31-6 CAPLUS  
CN Triphosphoric acid, P-[(2R,5S)-[5-(4-amino-5-fluoro-2-oxo-1(2H)-pyrimidinyl)tetrahydro-2-furanyl]methyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 128112-71-0P 189818-67-5P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

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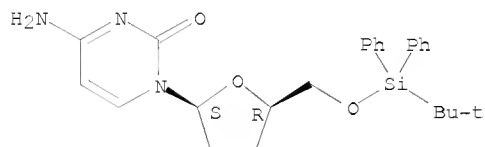
(Reactant or reagent)

(dideoxynucleoside analog preparation for treatment or prevention of  
flaviviridae infections)

RN 128112-71-0 CAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-5-[[[(1,1-  
dimethylethyl)diphenylsilyl]oxy]methyl]tetrahydro-2-furanyl]- (CA INDEX  
NAME)

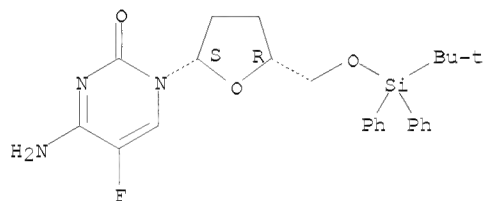
Absolute stereochemistry.



RN 189818-67-5 CAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-5-[[[(1,1-  
dimethylethyl)diphenylsilyl]oxy]methyl]tetrahydro-2-furanyl]-5-fluoro-  
(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT 656799-00-7P 656799-01-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(dideoxynucleoside analog preparation for treatment or prevention of  
flaviviridae infections)

RN 656799-00-7 CAPLUS

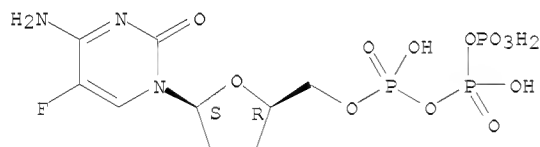
CN Triphosphoric acid, P-[[[(2R,5S)-5-(4-amino-5-fluoro-2-oxo-1(2H)-  
pyrimidinyl)tetrahydro-2-furanyl]methyl] ester, compd. with  
N,N-diethylethanamine (9CI) (CA INDEX NAME)

CM 1

CRN 161170-31-6

CMF C9 H15 F N3 O12 P3

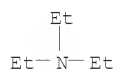
Absolute stereochemistry.



CM 2

CRN 121-44-8

CMF C6 H15 N



RN 656799-01-8 CAPLUS

McIntosh



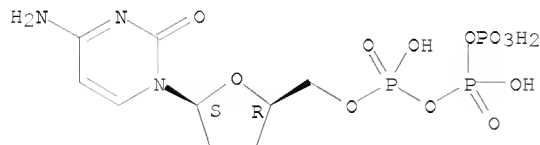
10045292

CN Triphosphoric acid, P-[[[(2R,5S)-5-(4-amino-2-oxo-1(2H)-pyrimidinyl)tetrahydro-2-furanyl]methyl] ester, compd. with N,N-diethylethanamine (9CI) (CA INDEX NAME)

CM 1

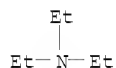
CRN 161170-30-5  
CMF C9 H16 N3 O12 P3

Absolute stereochemistry.



CM 2

CRN 121-44-8  
CMF C6 H15 N



L13 ANSWER 26 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2004:60253 CAPLUS  
DN 140:127195  
TI Antibodies specifically bind to anionic phospholipids and/or aminophospholipids conjugated with duramycin peptide for treating viral infections and cancer  
IN Thorpe, Philip E.; Soares, Melina M.; Huang, Xianming; He, Jin; Ran, Sophia  
PA Board of Regents the University of Texas System, USA  
SO PCI Int. Appl., 378 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 17

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004006847	A2	20040122	WO 2003-US21925	20030715
	WO 2004006847	A3	20050407		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	CA 2491310	A1	20040122	CA 2003-2491310	20030715
	AU 2003247869	A1	20040202	AU 2003-247869	20030715
	US 20040175378	A1	20040909	US 2003-620850	20030715
	EP 1537146	A2	20050608	EP 2003-764600	20030715
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
	CN 1668644	A	20050914	CN 2003-816751	20030715
	JP 2005537267	T	20051208	JP 2004-521771	20030715
	BR 2003012692	A	20070626	BR 2003-12692	20030715
	MX 2005PA00652	A	20050819	MX 2005-PA652	20050114
	IN 2008DN00130	A	20080620	IN 2008-DN130	20080104
PRAI	US 2002-396263P	P	20020715		
	WO 2003-US21925	W	20030715		

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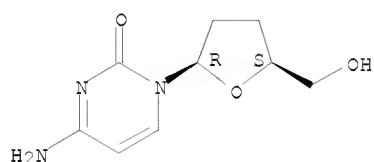
IN 2005-DN416 A3 20050203

AB Disclosed are surprising discoveries concerning the role of anionic phospholipids and aminophospholipids in tumor vasculature and in viral entry and spread, and compns. and methods for utilizing these findings in the treatment of cancer and viral infections. Also disclosed are advantageous antibody, immunoconjugate and duramycin-based compns. and combinations that bind and inhibit anionic phospholipids and aminophospholipids, for use in the safe and effective treatment of cancer, viral infections and related diseases.

IT 7481-89-2D, Zalcitabine, conjugates  
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (antibodies specifically bind to anionic phospholipids and/or aminophospholipids conjugated with duramycin peptide for treating viral infections and cancer)

RN 7481-89-2 CAPLUS  
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 27 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2003:920253 CAPLUS  
 DN 140:350071  
 TI Effect of antiretroviral therapy on liver-related mortality in patients with HIV and hepatitis C virus coinfection  
 AU Qurishi, Nazifa; Kreuzberg, Christina; Luechters, Guido; Effenberger, Wolfgang; Kupfer, Bernd; Sauerbruch, Tilman; Rockstroh, Juergen K.; Spengler, Ulrich  
 CS Department of Internal Medicine, University of Bonn, Bonn, D-53105, Germany  
 SO Lancet (2003), 362(9397), 1708-1713  
 CODEN: LANCAO; ISSN: 0140-6736  
 PB Elsevier Science Ltd.  
 DT Journal  
 LA English  
 AB Highly active antiretroviral therapy (HAART) has improved the prognosis of HIV infection. However, replication of hepatitis C virus (HCV) is not inhibited by HAART, and treatment-related hepatotoxicity is common. To clarify the effect of HAART in HIV/HCV-coinfected patients, we studied liver-related mortality and overall mortality in 285 patients who were regularly treated during the period 1990-2002 at our department. Survival was analyzed retrospectively by Kaplan-Meier and Cox's regression analyses after patients (81% hemophiliacs) had been stratified into three groups according to their antiretroviral therapy (HAART n=93, available after 1995; treatment exclusively with nucleoside analogs n=55, available after 1992; or no treatment, n=137). Liver-related mortality rates were 0.45, 0.69, and 1.70 per 100 person-years in the HAART, antiretroviral-treatment, and untreated groups. Kaplan-Meier anal. of liver-related mortality confirmed the significant survival benefit in patients with antiretroviral therapy, and regression anal. identified HAART (odds ratio 0.106 [95% CI 0.020-0.564]), antiretroviral treatment (0.283 [0.103-0.780]), CD4-pos. T-cell count (0.746 [0.641-0.868] per 0.05+109 cells/L), serum cholinesterase (0.962 [0.938-0.986] per 100 U/L), and age (1.065 [1.027-1.105] per yr) as independent predictors of liver-related survival. Severe drug-related hepatotoxicity was seen in five patients treated with nucleoside analogs alone and 13 treated with HAART. No patient died from drug-related hepatotoxicity. In addition to improved overall survival, antiretroviral therapy significantly reduced long-term liver-related mortality in our patients. This survival benefit seems to outweigh by far the associated risks of severe hepatotoxicity.

IT 7481-89-2, Zalcitabine  
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

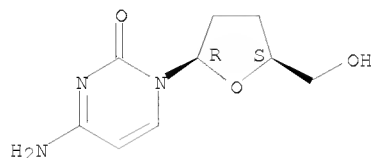
10045292

(antiretroviral therapy effect on liver-related mortality in patients with HIV and hepatitis C virus coinfection)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 28 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2003:772804 CAPLUS

DN 140:296896

TI Risk of severe hepatotoxicity associated with antiretroviral therapy in the HIV-NAT Cohort, Thailand, 1996-2001

AU Law, W. Phillip; Dore, Gregory J.; Duncombe, Chris J.; Mahanontharit, Apicha; Boyd, Mark A.; Ruxrungtham, Kiat; Lange, Joep M.; Phanuphak, Prapchan; Cooper, David A.

CS National Centre in HIV Epidemiology and Clinical Research, University of New South Wales, Sydney, 2010, Australia

SO AIDS (London, United Kingdom) (2003), 17(15), 2191-2199

CODEN: AIDSET; ISSN: 0269-9370

PB Lippincott Williams & Wilkins

DT Journal

LA English

AB The aim was to examine rates and predictors of severe hepatotoxicity with combination antiretroviral therapy in a developing country setting: the eight HIV-NAT randomized controlled trials in Thailand. All patients (n = 692) received at least two nucleoside reverse transcriptase inhibitors; 215 also received a non-nucleoside reverse transcriptase inhibitor (NNRTI) and 135 also received a protease inhibitor. Severe hepatotoxicity was defined as an increase in alanine aminotransferase (ALT) level to five times the upper limit of normal and an increase of at least 100 U/l from baseline. Liver function tests were available at baseline and weeks 4, 8, 12, 24, 36 and 48. Hepatitis B virus (HBV) and hepatitis C virus (HCV) testing was performed on stored serum. Mean age was 32.3 yr; 52% were male, 11% had Centers for Disease Control and Prevention category C HIV disease at baseline, and 22% had received prior antiretroviral therapy. Prevalence of HBV, HCV and HBV/HCV coinfection was 8.7%, 7.2%, and 0.4%, resp. Incidence of severe hepatotoxicity was 6.1/100 person-years [95% confidence interval (CI), 4.3-8.3/100]. In multivariate anal., predictors of severe hepatotoxicity were HBV or HCV coinfection, and NNRTI-containing therapy. Incidence of severe hepatotoxicity was particularly high among patients receiving nevirapine (18.5/100 person-years; 95% CI, 11.6-27.8) and nevirapine/efavirenz (44.4/100 person-years; 95% CI, 12.1-113.7). Incidence and risk factors for severe hepatotoxicity appear similar among these Thai patients to those in other racial groups. Development of standardized antiretroviral therapy regimens for developing country settings should consider potential toxicity and capabilities for monitoring of toxicity.

IT 7481-89-2, Zalcitabine

RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

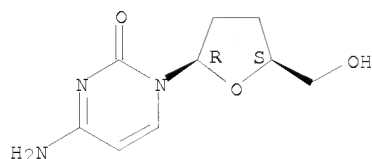
(risk of severe hepatotoxicity associated with antiretroviral therapy in HIV-infected patients)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

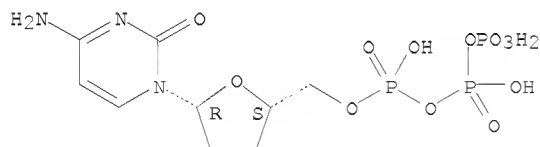
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RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 29 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2003:411733 CAPLUS  
DN 139:374222  
TI Canonical 3'-deoxyribonucleotides as a chain terminator for HCV  
NS5B RNA-dependent RNA polymerase  
AU Shim, Jaehoon; Larson, Gabry; Lai, Vicky; Naim, Suhaila; Wu, Jim Zhen  
CS Drug discovery, Ribapharm Corporation, Costa Mesa, CA, 92626, USA  
SO Antiviral Research (2003), 58(3), 243-251  
CODEN: ARSRDR; ISSN: 0166-3542  
PB Elsevier Science B.V.  
DT Journal  
LA English  
AB Nucleoside chain terminators represent one of the most promising classes of antiviral drug for DNA viruses and retroviral infection; however, they have not been fully explored against RNA viral polymerases. In this report, we investigate the notion of employing canonical 3'-deoxyribonucleoside triphosphates (3'-dNTPs) as a chain terminator for hepatitis C virus (HCV) NS5B RNA-dependent RNA polymerase (RdRp). Using a HCV RNA transcript-dependent RNA elongating assay, we found that they inhibit NS5B RdRp with  $K_i$  ranged from 0.7 to 23  $\mu$ M. Addnl. structure-activity relation studies showed that removal of 2'-hydroxyl group, elimination of ribose's 2',3'-carbon-carbon bond, or addition of 5-Me group to a pyrimidine base is detrimental to 3'-dNTP's potency. Direct evidence was obtained that all four canonical 3'-dNTP are incorporated into elongating RNA chains and the incorporation terminates NS5B RdRp-catalyzed RNA synthesis. The  $K_i$  values for each of 3'-dNTPs were determined in the single nucleotide incorporation expts. The nucleoside form of 3'-dNTPs was further evaluated in a cell culture-based HCV subgenomic replicon assay. The discrepancy between the potent in vitro activity and the weak cellular activity of these chain terminators was discussed in the context of nucleoside metabolism. This proof of concept study demonstrates that canonical 3'-dNTPs can function as an effective chain terminator for HCV NS5B RdRp with cytidine as the preferred nucleoside scaffold. Our results further sheds light on the potential hurdles that need to be overcome for successful development of active nucleoside chain terminators in vivo for a viral RNA polymerase, especially the HCV NS5B RdRp.  
IT 66004-77-1  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(canonical 3'-deoxyribonucleotides as a chain terminator for HCV NS5B RNA-dependent RNA polymerase)  
RN 66004-77-1 CAPLUS  
CN Cytidine 5'-(tetrahydrogen triphosphate), 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry.



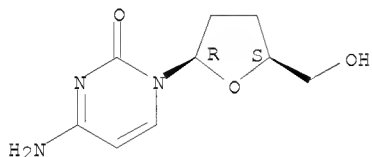
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 30 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2003:347498 CAPLUS  
DN 139:47738

McIntosh

TI Performance characteristics of the TRUGENE HIV-1 genotyping kit and the OpenGene DNA sequencing system  
 AU Kuritzkes, Daniel R.; Grant, Robert M.; Feorino, Paul; Griswold, Marshal; Hoover, Marie; Young, Russell; Day, Stephen; Lloyd, Robert M., Jr.; Reid, Caroline; Morgan, Gillian F.; Winslow, Dean L.  
 CS Division of Infectious Diseases, University of Colorado Health Sciences Center, Denver, CO, USA  
 SO Journal of Clinical Microbiology (2003), 41(4), 1594-1599  
 CODEN: JCMIDW; ISSN: 0095-1137  
 PB American Society for Microbiology  
 DT Journal  
 LA English  
 AB The TRUGENE HIV-1 Genotyping Kit and OpenGene DNA Sequencing System are designed to sequence the protease (PR)- and reverse transcriptase (RT)-coding regions of human immunodeficiency virus type 1 (HIV-1) pol. Studies were undertaken to determine the accuracy of this assay system in detecting resistance-associated mutations and to determine the effects of RNA extraction methods, anticoagulants, specimen handling, and potentially interfering substances. Samples were plasma obtained from HIV-infected subjects or seroneg. plasma to which viruses derived from wild-type and mutant infectious mol. clones (IMC) of HIV-1 were added. Extraction methods tested included standard and UltraSensitive AMPLICOR HIV-1 MONITOR, QIAGEN viral RNA extraction mini kit, and QIAGEN Ultra HIV extraction kit, and NASBA manual HIV-1 quant. NucliSens. Sequence data from test sites were compared to a "gold standard" reference sequence to determine the percent agreement. Comparisons between test and reference sequences at the nucleotide level showed 97.5 to 100% agreement. Similar results were obtained regardless of extraction method, regardless of use of EDTA or acid citrate dextrose as anticoagulant, and despite the presence of triglycerides, bilirubin, Hb, antiretroviral drugs, HIV-2, hepatitis C virus (HCV), HBV, cytomegalovirus, human T-cell leukemia virus type 1 (HTLV-1), or HTLV-2. Samples with HIV-1 RNA titers of  $\geq 1,000$  copies/mL gave consistent results. The TRUGENE HIV-1 Genotyping Kit and OpenGene DNA Sequencing System consistently generate highly accurate sequence data when tested with IMC-derived HIV and patient samples.  
 IT 7481-89-2, Zalcitabine  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (potentially interfering substances have no impact on performance characteristics of TRUGENE HIV-1 genotyping kit and OpenGene DNA sequencing system)  
 RN 7481-89-2 CAPLUS  
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 31 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2003:222146 CAPLUS  
 DN 138:253701  
 TI Fusion proteins comprising transduction and cytotoxic domains for treating pathogenic infection  
 IN Dowdy, Steven F.  
 PA Washington University, USA  
 SO U.S. Pat. Appl. Publ., 49 pp., Cont.-in-part of U.S. Provisional Ser. No. 82,402.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20030054000	A1	20030320	US 2001-775052	20010201

10045292

US 6645501 B2 20031111  
US 6221355 B1 20010424 US 1998-208966 19981210  
PRAI US 1997-69012P P 19971210  
US 1998-82402P P 19980420

AB The present invention provides an anti-pathogen system comprising one or more fusion proteins that includes a transduction domain and a cytotoxic domain. The cytotoxic domain is specifically activated by a pathogen infection. The anti-pathogen system effectively kills or injures cells infected by one or a combination of different pathogens. Further provided are protein transduction domains that provide enhanced transduction efficiency. The pathogen includes cytomegalovirus, herpes simplex virus, hepatitis C virus, yellow fever virus, flavivirus, rhinovirus, HIV-1, HIV-2, HTLV-III, LAV, Plasmodium falciparum, Plasmodium vivax, Plasmodium ovale, Plasmodium malariae, etc.

IT 7481-89-2, DdC

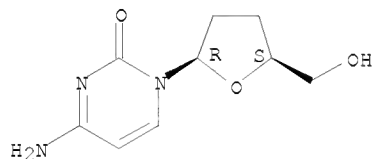
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(fusion proteins comprising transduction and cytotoxic domains for treating viral, retroviral and plasmodial infections)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 32 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2002:927626 CAPLUS

DN 138:20431

TI Use of mitochondrial DNA-specific quantitative real-time PCR for diagnosis and monitoring drug toxicity in humans suffering with various disorders such as viral infections, neurological disorders, cancer, arthritis, male sterility or organ failure

IN Cote, Helene; Montaner, Julio; O'Shaughnessy, Michael V.

PA The University of British Columbia, Can.

SO PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002097124	A1	20021205	WO 2002-CA796	20020529
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McIntosh

WO 2002-CA796 W 20020529

AB The invention discloses the use of quant. real-time polymerase chain reaction (PCR) to monitor drug toxicity, which involves measuring the relative amount of mitochondrial DNA in peripheral blood cells obtained from individuals suffering with various disorders. The invention relates that the quant. real-time PCR involves co-amplification of a mitochondrial sequence and a reference sequence, such as a genomic sequence. The invention also discloses that said disorders include HIV infection, cancer, hepatitis A, hepatitis B, hepatitis C, arthritis, Alzheimer's disease, Parkinson's disease, or Huntington's disease. The invention also relates that said drugs used to treat patients include nucleoside or nucleotide analogs, and/or reverse transcriptase inhibitors. The invention further discloses that the said method can be used to diagnose conditions such as male infertility and organ failure. The method was illustrated by detecting the amount of mitochondrial gene CCOI and the nuclear gene ASPOLy in HIV infected individuals undergoing antiviral therapy.

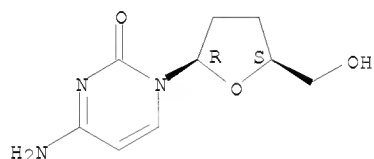
IT 7481-89-2, Hivid

RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(mitochondrial DNA-specific quant. real-time PCR for monitoring drug toxicity in individuals suffering for various disorders such as viral infections, neurol. disorders, cancer, and arthritis)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
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L13 ANSWER 33 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

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DN 138:14152

TI Preparation of enzymic ribonucleic acid peptide conjugates as antitumor and antiviral agents and compositions for cellular delivery

IN Beigelman, Leonid; Matulic-Adamic, Jasenka; Vargeese, Chandra; Karpeisky, Alexander; Blatt, Lawrence; Shaffer, Christopher

PA Ribozyme Pharmaceuticals, Inc, USA

SO PCT Int. Appl., 220 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 265

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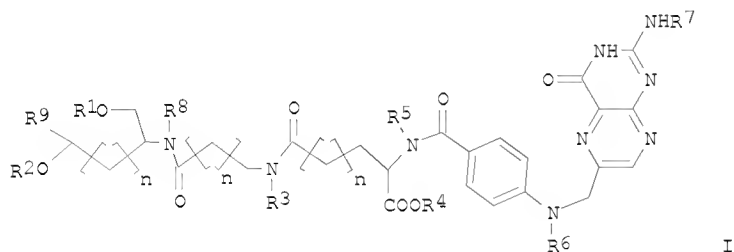
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GI



**AB** This invention features peptide nucleotide conjugates I wherein each R1-R8 are independently hydrogen, alkyl, substituted alkyl, aryl, substituted aryl, or a protecting group, each "n" is independently an integer from 0 to about 200, R9 is a straight or branched chain alkyl, substituted alkyl, aryl, or substituted aryl, and R2 is a phosphorus containing group, nucleoside, nucleotide, small mol., nucleic acid, or a solid support comprising a linker., degradable linkers, compns., methods of synthesis, and applications thereof, including folate, galactose, galactosamine, N-acetyl galactosamine, PEG, phospholipid, peptide and human serum albumin (HAS) derived conjugates of biol. active compds., including antibodies, antivirals, chemotherapeutics, peptides, proteins, hormones nucleosides, nucleotides, non-nucleosides, and nucleic acids including enzymic nucleic acids, DNAzymes, allozymes, antisense, dsRNA, siRNA, triplex oligonucleotides, 2,5-A chimeras, decoys and aptamers. Thus, 1-O-(4-monomethoxytrityl)-N-(12'-hydroxydodecanoyl-2-acetamido-3,4,6-tri-O-acetyl-2-deoxy-3-D-galactopyranose)-D-threoninol 3-O-(2-cyanoethyl,N,N-diisopropylphosphoramidite) was prepared and incorporated into RNA. A method of treating a cancer patient, comprising contacting cells of patient wherein said cancer is breast cancer, lung cancer, colorectal cancer, brain cancer, esophageal cancer, stomach cancer, bladder cancer, pancreatic cancer, cervical cancer, head and neck cancer, ovarian cancer, melanoma, lymphoma, glioma, or multidrug resistant cancers and/or viral infections including HIV, HBV, HCV, CMV, RSV, HSV, poliovirus, influenza, rhinovirus, west nile virus, Ebola virus, foot and mouth virus, and papilloma.

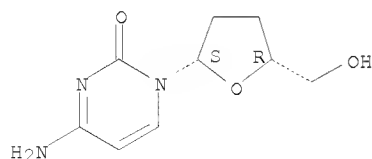
**IT** 121154-51-6 147058-39-7

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(preparation of enzymic RNA peptide conjugates as antitumor and antiviral agents and compns. for cellular delivery)

RN 121154-51-6 CAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



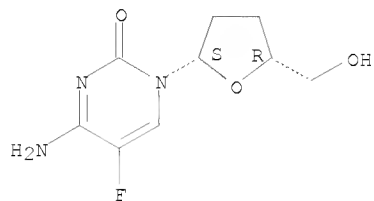
RN 147058-39-7 CAPLUS

McIntosh

10045292

CN 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L13 ANSWER 34 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2002:869219 CAPLUS

DN 137:363028

TI Drug screening assays and kits for discovery of anti-microbial and chemotherapeutics agents

IN McCarthy, Lawrence; Kong, Lilly; Shao, Tang; Su, Xin

PA Focus Technologies, Inc., USA

SO PCT Int. Appl., 94 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002090993	A2	20021114	WO 2001-US44783	20011127
WO 2002090993	A3	20040415		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GE, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2430201	A1	20021114	CA 2001-2430201	20011127
AU 2001297821	A1	20021118	AU 2001-297821	20011127
US 20030039957	A1	20030227	US 2001-996187	20011127
EP 1435000	A2	20040707	EP 2001-273944	20011127
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
JP 2005500022	T	20050106	JP 2002-588199	20011127
PRAI US 2000-253150P	P	20001127		
US 2001-304533P	P	20010709		
US 2001-297686P	P	20010712		
US 2001-996187	A2	20011127		
WO 2001-US44783	W	20011127		

AB Methods and compns. for detecting the phenotype of a bioactive mol. assays. More specifically, are provided methods and compns. are provided for determining the suitability of one ore more candidate compds. prior to or during the course of chemotherapy or anti-infective therapy, for their capacity to inhibit the bioactive mols. of micro-organisms, cancers and as an assay for expression in transgene therapy. Also provided are phenotypic assays for drug discovery. Claimed sequences were not present at the time of publication.

IT 7481-89-2, Zalcitabine

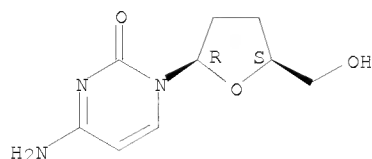
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(drug screening assays for discovery of anti-microbial and chemotherapeutics agents)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

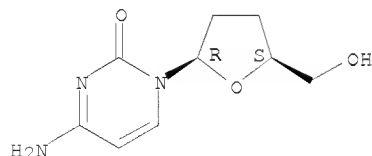
McIntosh



L13 ANSWER 35 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2002:832613 CAPLUS  
 DN 137:333119  
 TI 3-Aminopyridine-2-carboxyaldehyde thiosemicarbazones and methods using  
 them for treating viral and fungal infections  
 IN King, Ivan C.; Doyle, Terrence W.; Sznol, Mario; Sartorelli, Alan C.;  
 Cheng, Yung-Chi  
 PA Vion Pharmaceuticals, Inc., USA; Yale University  
 SO PCT Int. Appl., 68 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002085358	A2	20021031	WO 2002-US12358	20020418
	WO 2002085358	A3	20021219		
	W:		AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW		
	RW:		GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
	AU 2002256283	A1	20021105	AU 2002-256283	20020418
	US 20020188011	A1	20021212	US 2002-126050	20020418
	US 6911460	B2	20050628		
	CN 1503669	A	20040609	CN 2002-808591	20020418
	US 20050261251	A1	20051124	US 2005-93648	20050330
PRAI	US 2001-285559P	F	20010420		
	US 2002-126050	A3	20020418		
	WO 2002-US12358	W	20020418		
OS	MARPAT 137:333119				
AB	The invention provides methods for treating viral or fungal infections using 3-aminopyridine-2-carboxyaldehyde thiosemicarbazone (3-AP) and 3-amino-4-methylpyridine-2-carboxaldehyde thiosemicarbazone (3-AMP), and prodrug forms thereof, as well as pharmaceutical compns. comprising these compds. Preparation of compds. of the invention is described.				
IT	7481-89-2, 2',3'-Dideoxycytidine 147058-39-7 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (aminopyridinecarboxyaldehyde thiosemicarbazones for treatment of viral and fungal infections)				
RN	7481-89-2 CAPLUS				
CN	Cytidine, 2',3'-dideoxy- (CA INDEX NAME)				

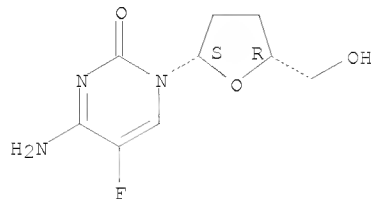
Absolute stereochemistry. Rotation (+).



RN 147058-39-7 CAPLUS  
 CN 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

10045292

Absolute stereochemistry. Rotation (-).



L13 ANSWER 36 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2002:521462 CAPLUS  
DN 137:88442  
TI Incensole and furanogermacrene and compounds in treatment for inhibiting  
neoplastic lesions and microorganisms  
IN Shanahan-Pendergast, Elisabeth  
PA Ire.  
SO PCT Int. Appl., 68 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002053138	A2	20020711	WO 2002-IE1	20020102
	WO 2002053138	A3	20020919		
	W:	AE, AG, AT, AU, BB, BG, CA, CH, CN, CO, CU, CZ, LU, LV, MA, MD, UA, UG, US, VN, YU, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, AT, BE, CH, CY, DE, ES, FI, ML, MR, NE, SN, TD, TG			
	AU 2002219472	A1	20020716	AU 2002-219472	20020102
	EP 1351678	A2	20031015	EP 2002-727007	20020102
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	US 20040092583	A1	20040513	US 2004-250535	20040102
PRAI	IE 2001-2	A	20010102		
	WO 2002-IE1	W	20020102		

OS MARPAT 137:88442

AB The invention discloses the use of incensole and/or furanogermacrene, derivs. metabolites and precursors thereof in the treatment of neoplasia, particularly resistant neoplasia and immunodysregulatory disorders. These compds. can be administered alone or in combination with conventional chemotherapeutic, antiviral, antiparasite agents, radiation and/or surgery. Incensole and furanogermacrene and their mixture showed antitumor activity against various human carcinomas and melanomas and antimicrobial activity against Staphylococcus aureus and Enterococcus faecalis.

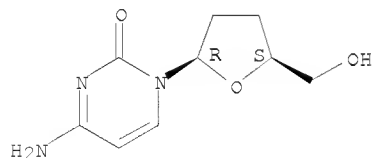
IT 7481-89-2, DdC

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(pharmaceutical formulation further containing; incensole and furanogermacrene and compds. as antitumor and antimicrobial agents)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

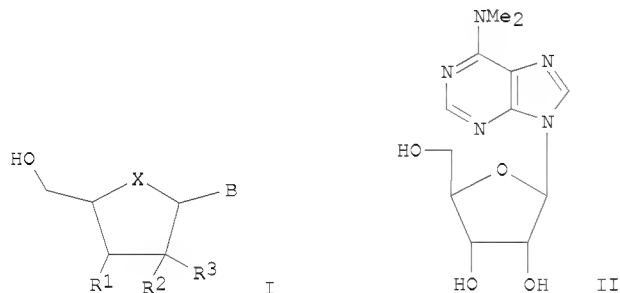


L13 ANSWER 37 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2002:171918 CAPLUS  
DN 136:217007

McIntosh

TI Preparation of antiviral nucleoside derivatives as inhibitors of  
subgenomic hepatitis C virus RNA replication  
IN Devos, Rene; Dymock, Brian William; Hobbs, Christopher John; Jiang,  
Wen-rong; Martin, Joseph Armstrong; Merrett, John Herbert; Najera, Isabel;  
Shimma, Nobuo; Tsukuda, Takuo  
PA F. Hoffmann-La Roche Ag, Switz.  
SO PCT Int. Appl., 225 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002018404	A2	20020307	WO 2001-EP9633	20010821
	WO 2002018404	A9	20031002		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 20030008841	A1	20030109	US 2001-923620	20010807
	CA 2419399	A1	20020307	CA 2001-2419399	20010821
	AU 2001095497	A	20020313	AU 2001-95497	20010821
	EP 1315736	A2	20030604	EP 2001-976128	20010821
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	BR 2001013611	A	20030624	BR 2001-13611	20010821
	JP 2004513083	T	20040430	JP 2002-523918	20010821
	ZA 2003001540	A	20040621	ZA 2003-1540	20030225
	MX 2003PA01775	A	20030604	MX 2003-PA1775	20030227
	US 20040110718	A1	20040610	US 2003-678804	20031003
PRAI	GB 2000-21285	A	20000830		
	GB 2000-26611	A	20001031		
	US 2001-923620	B1	20010807		
	WO 2001-EP9633	W	20010821		
OS	MARPAT 136:217007				
GI					



AB Nucleosides I, wherein R1 is hydrogen, hydroxy, alkyl, hydroxyalkyl, alkoxy, halogen, cyano, isocyano or azido; R2 is hydrogen, hydroxy, alkoxy, chlorine, bromine or iodine; R3 is hydrogen; or R2 and R3 together represent =CH2; or R2 and R3 represent fluorine; X is O, S or CH2; B is a substituted purine base, were prepared as inhibitors of subgenomic hepatitis C virus (HCV) RNA replication. Thus, nucleoside II was prepared and tested for the inhibition of HCV RNA replication (EC50 = 0.6  $\mu$ M).

IT 7481-89-2P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES



10045292

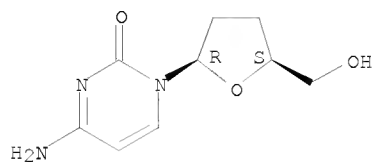
(Uses)

(preparation of antiviral nucleoside derivs. as inhibitors of subgenomic hepatitis C virus RNA replication)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 38 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2002:109650 CAPLUS

DN 136:288583

TI Effects of HAART on hepatitis C, hepatitis G, and TT virus in multiply coinfecting HIV-positive patients with haemophilia

AU Takamatsu, J.; Toyoda, H.; Fukuda, Y.; Nakano, I.; Yokozaki, S.; Hayashi, K.; Saito, H.

CS Department of Transfusion Medicine, Nagoya University School of Medicine, Nagoya, 466-8550, Japan

SO Haemophilia (2001), 7(6), 575-581

CODEN: HAEMF4; ISSN: 1351-8216

PB Blackwell Science Ltd.

DT Journal

LA English

AB In multiply coinfecting human immunodeficiency virus (HIV)-pos. patients, we investigated the effects of high-activity antiretroviral therapy (HAART) using HIV protease inhibitors on three other viruses: hepatitis C virus (HCV), hepatitis G virus (HGV), and TT virus (TTV). Viral concns. were measured serially by polymerase chain reaction methods in five patients with quadruple infection (HIV, HCV, HGV, and TTV) and in two patients with triple infection (HIV, HCV, and HGV) before and during HAART. In addition, CD4+ cell counts and serum alanine aminotransferase (ALT) levels were measured serially. Generally we observed no difference in serum HCV RNA, HGV RNA, or TTV DNA concns. between samples obtained before and after initiation of HAART, whereas HIV RNA concentration decreased and CD4 counts increased in most patients. However, two patients had markedly decreased concns. of HCV RNA and HGV RNA, resp., more than 12 mo after beginning HAART. Normalization of serum ALT levels was observed in a patient with decline of HCV RNA concns. No interactions were observed among these four viruses. HAART had no apparent direct effects on HCV, HGV, or TTV. Further studies will be required to elucidate whether the restoration of immune status through suppression of HIV replication by HAART may affect HCV or HGV RNA concns.

IT 7481-89-2, Zalcitabine

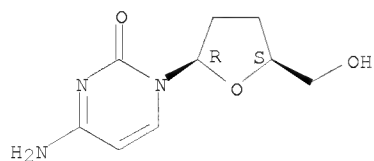
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(HAART effect on hepatitis C, hepatitis G, and TT virus in HIV-pos. patients with multiple coinfections and haemophilia)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

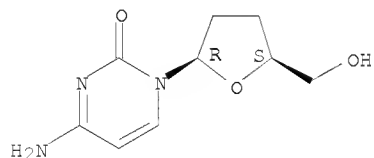
McIntosh

10045292

L13 ANSWER 39 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2002:107667 CAPLUS  
DN 136:145568  
TI Improved tolerance to anti-viral and anti-tumor chemotherapy by  
administration of erythropoietin  
IN Itri, Loretta; Bowers, Peter  
PA Ortho-McNeil Pharmaceutical, Inc., USA  
SO PCT Int. Appl., 56 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002010743	A1	20020207	WO 2001-US24426	20010801
	W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW	
	RW:			GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
	CA 2417550	A1	20020207	CA 2001-2417550	20010801
	US 20020052317	A1	20020502	US 2001-921516	20010801
	EP 1325324	A1	20030709	EP 2001-959497	20010801
	R:			AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR	
	HU 2003003056	A2	20031229	HU 2003-3056	20010801
	JP 2004505114	T	20040219	JP 2002-516619	20010801
	BR 2001013179	A	20040622	BR 2001-13179	20010801
	IN 2003KN00128	A	20050311	IN 2003-KN128	20030131
	MX 2003PA01039	A	20040910	MX 2003-PA1039	20030203
	ZA 2003001634	A	20040622	ZA 2003-1634	20030227
PRAI	US 2000-222538P	P	20000802		
	WO 2001-US24426	W	20010801		
AB	The present invention provides methods using erythropoietin to improve the tolerance of anti-viral and anti-tumor chemotherapeutic regimens containing interferon. The invention also described improved methods to treat chronic HCV by adjusting the dose of ribavirin to tailor the active dose of the drug while supporting the Hb levels in the patient with EPO. The present invention also provides anti-viral dosing regimens, particularly for chronic HCV comprising administration of an interferon containing anti-viral medicament, EPO, and a compound that reduces the amount of active tumor necrosis factor in the subject.				
IT	7481-89-2, Zalcitabine RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (improved tolerance to anti-viral and anti-tumor chemotherapy by administration of erythropoietin)				
RN	7481-89-2 CAPLUS				
CN	Cytidine, 2',3'-dideoxy- (CA INDEX NAME)				

Absolute stereochemistry. Rotation (+).



RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 40 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2001:808478 CAPLUS  
DN 136:114686  
TI Hepatitis C Virus NS3 NTPase/Helicase: Different Stereoselectivity in

McIntosh

# Nucleoside Triphosphate Utilisation Suggests that NTPase and Helicase Activities are Coupled by a Nucleotide-dependent Rate Limiting Step

AU Locatelli, Giada A.; Gosselin, Gilles; Spadari, Silvio; Maga, Giovanni  
 CS Istituto di Genetica Biochimica ed Evoluzionistica IGBE-CNR, Pavia, Italy  
 SO Journal of Molecular Biology (2001), 313(4), 683-694  
 CODEN: JMOBAK; ISSN: 0022-2836

PB Academic Press

DT Journal

LA English

AB Hepatitis C virus (HCV) NS3 protein is a multifunctional enzyme, possessing protease, NTPase and helicase activities within a single polypeptide of 625 amino acid residues. These activities are essential for the virus life cycle and are considered attractive targets for anti-HCV chemotherapy. Beside ATP, the NS3 protein has the ability to utilize deoxynucleoside triphosphates (dNTPs) as the energy source for nucleic acid unwinding. We have performed an extensive anal. of the substrate specificities of both NS3 NTPase and helicase activities with respect to all four dNTPs as well as with dideoxynucleoside triphosphate (ddNTP) analogs, including both D-(β) and L-(β)-deoxy and dideoxy-nucleoside triphosphates. Our results show that almost all dNTPs and ddNTPs tested were able to inhibit hydrolysis of ATP by the NTPase activity, albeit with different efficiencies. Moreover, this activity showed almost no stereoselectivity, being able to recognize both D-(β), L-(β)-deoxy and ddNTPs. On the contrary, the helicase activity had more strict substrate selectivity, since, among D-(β)-nucleotides, only ddTTP and its analog 2',3'-dideoxy-thymidine triphosphate could be used as substrates with an efficiency comparable to ATP, whereas among L-(β)-nucleotides, only L-(β)-dATP was utilized. Comparison of the steady-state kinetic parameters for both reactions, suggested that dATP, L-(β)-dCTP and L-(β)-dTTP, specifically reduced a rate limiting step present in the helicase, but not in the NTPase, reaction pathway. These results suggest that NS3-associated NTPase and helicase activities have different sensitivities towards different classes of deoxy and dideoxy-nucleoside analogs, depending on a specific step in the reaction, as well as show different enantioselectivity for the D-(β) and L-(β)-conformations of the sugar ring. These observations provide an essential mechanistic background for the development of specific nucleotide analogs targeting either activity as potential anti-HCV agents. (c)  
 2001 Academic Press.

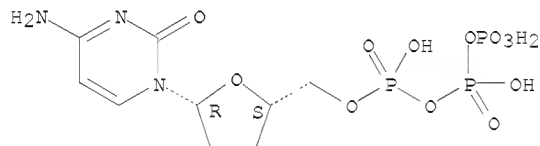
IT 66004-77-1, DdCTP 161170-30-5

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (stereoselectivity of hepatitis C virus NS3 NTPase/helicase suggests  
 NTPase and helicase activities are coupled by nucleotide-dependent rate  
 limiting step)

RN 66004-77-1 CAPLUS

CN Cytidine 5'-(tetrahydrogen triphosphate), 2',3'-dideoxy- (CA INDEX NAME)

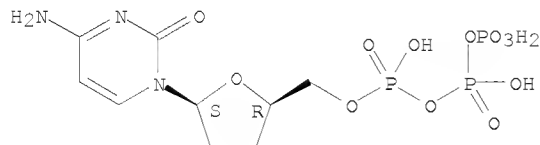
Absolute stereochemistry.



RN 161170-30-5 CAPLUS

CN Triphosphoric acid, P-[[[(2R,5S)-5-(4-amino-2-oxo-1(2H)-pyrimidin-1-yl)tetrahydro-2-furanyl]methyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

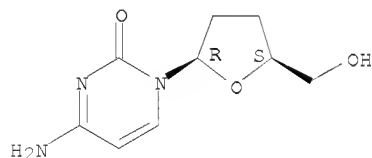


RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD

## ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 41 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2001:784185 CAPLUS  
 DN 136:95621  
 TI Low frequency of severe hepatotoxicity and association with HCV coinfection in HIV-positive patients treated with HAART  
 AU Monforte, Antonell d'Arminio; Bugarini, Roberto; Pezzotti, Patrizio; De Luca, Andrea; Antinori, Andrea; Mussini, Cristina; Vigevani, Gian Marco; Tirelli, Umberto; Bruno, Raffaele; Gritti, Francesco; Piazza, Marcello; Chigiotti, Silvia; Chirrianni, Antonio; De Stefano, Carlo; Pizzigallo, Eligio; Perrella, Oreste; Moroni, Mauro  
 CS ICONA Study Group, Institute of Infectious and Tropical Diseases, L Sacco H, University of Milan, Milan, 20157, Italy  
 SO JAIDS, Journal of Acquired Immune Deficiency Syndromes (2001), 28(2), 114-123  
 CODEN: JJASFJ  
 PB Lippincott Williams & Wilkins  
 DT Journal  
 LA English  
 AB Highly active antiretroviral therapy (HAART) is strongly effective in reducing morbidity and mortality in HIV-1-pos. individuals. Its main drawback is the potential toxicity. Data on the frequency and determinants of severe hepatotoxicity in a clin. setting are still sparse. This is a prospective study of HIV-1-pos. individuals with known HBsAg and HCV-Ab serol. The study end point was progression to alanine aminotransferase (ALT) levels  $\geq 200$  IU/L after HAART initiation. Cumulative probability of progression to this end point was estimated by the Kaplan-Meier method. Crude and adjusted hazard ratios (HR) were estimated by proportional hazards regression model. One thousand two hundred fifty-five patients were included. HBsAg was found in 91 (7.2%), HCV-Ab in 578 (46.5%) patients; almost all injection drug users (451 of 482; 93.6%) were HCV-Ab pos. Sixty-one individuals progressed to the end point with a probability of 7.9% (95% confidence interval [CI], 5.6-10.0) of progression at 24 mo from starting. Independent factors predicting progression to the end point were baseline ALT levels (HR, 5.29; 95% CI, 3.24-8.65; every 10 IU/L higher), HCV-Ab positivity (HR, 4.01; 95% CI, 1.48-10.85) or both HBsAg and HCV-Ab positivity (HR, 3.85, 95% CI, 1.01-14.61), and previous non-HAART therapy (HR, 1.84, 95% CI, 1.04-3.42). Patients receiving stavudine-containing regimens had a lower risk than those receiving zidovudine-containing regimens (HR, 0.30, 95% CI, 0.12-0.71). There was a low risk of ALT  $\geq 200$  IU/L in the authors' cohort. Hepatitis C coinfection and elevated ALT levels at HAART initiation are important predictors of progression to ALT  $\geq 200$  IU/L; stavudine-containing regimens were associated with a lower risk compared with zidovudine-containing regimens.  
 IT 7481-89-2, Zalcitabine  
 RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (low frequency of severe hepatotoxicity and association with HCV coinfection in HIV-pos. humans treated with HAART)  
 RN 7481-89-2 CAPLUS  
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 42 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2000:867640 CAPLUS  
 DN 135:40476  
 TI The hepatitis C virus NS5B RNA-dependent RNA polymerase activity and

susceptibility to inhibitors is modulated by metal cations

AU Alaoui-Ismaili, Moulay Hicham; Hamel, Martine; L'Heureux, Lucille; Nicolas, Olivier; Bilimoria, Darius; Labonte, Patrick; Mounir, Samir; Rando, Robert F.

CS BioChem Pharma Inc., Laval, QC, H7V 4A7, Can.

SO Journal of Human Virology (2000), 3(6), 306-316  
CODEN: JHVIFC; ISSN: 1090-9508

PB Lippincott Williams & Wilkins

DT Journal

LA English

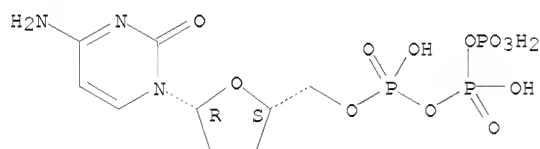
AB Objectives: The aim of this study was to understand the effect of metal cations on the hepatitis C virus (HCV) NS5B in vitro RNA-dependent RNA polymerase (RdRp) activity and its susceptibility to various inhibitors. Methods: A recombinant full-length HCV NS5B protein was expressed in insect cells and purified to homogeneity. RdRp activity was assessed using standard filtration or polyacrylamide gel-based assays. Results: Efficient inhibition of the HCV NS5B RdRp activity by gliotoxin, as well as by various substrate analogs, occurs in the presence of Mn<sup>2+</sup>, but not of Mg<sup>2+</sup>. Assays performed in the presence of both cofactors suggest that, in vitro, the enzyme's affinity for Mn<sup>2+</sup> is higher than that for Mg<sup>2+</sup>. In addition, the RdRp activity, displayed in the presence of heteropolymeric templates, is significantly increased when the metal cofactor consists of Mn<sup>2+</sup>. Finally, steady state kinetics showed that the velocity of the reaction, as well as the affinity of the enzyme for its substrate, could both be affected by the nature of the divalent metal cation used.

IT 66004-77-1, 2'-3' Dideoxycytidine triphosphate  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(hepatitis C virus NS5B RNA-dependent RNA polymerase activity and susceptibility to inhibitors is modulated by metal cations in vitro)

RN 66004-77-1 CAPLUS

CN Cytidine 5'-(tetrahydrogen triphosphate), 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 43 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2000:840382 CAPLUS

DN 135:40464

TI Safety and efficacy of interferon-ribavirin combination therapy in HCV-HIV coinfectd subjects: An early report

AU Zylberberg, H.; Benhamou, Y.; Lagneaux, J. L.; Landau, A.; Chaix, M. -L.; Fontaine, H.; Bochet, M.; Poynard, T.; Katlama, C.; Pialoux, G.; Brechot, C.; Pol, S.

CS Unite d'Hepatologie, INSERM U370, Unite d'Hepatologie, INSERM U370, CHU Necker, Paris, Fr.

SO Gut (2000), 47(5), 694-697  
CODEN: GUTTAK; ISSN: 0017-5749

PB BMJ Publishing Group

DT Journal

LA English

AB More severe liver disease together with a poor response rate to  $\alpha$  interferon argue for the use of more potent anti-hepatitis C virus (HCV) therapies in human immunodeficiency virus (HIV)-HCV coinfectd patients, but the efficacy and safety of interferon-ribavirin combination therapy in HIV infected subjects are unknown. Aim of this study was to retrospectively evaluate the efficacy and safety of anti-HCV combination therapy in 21 HCV-HIV coinfectd patients receiving antiretroviral therapy, and to access the clin. relevance of in vitro inhibition of phosphorylation by ribavirin of potent inhibitors of HIV-i.e., zidovudine, stavudine, and zalcitabine. Twenty one patients were treated with combined antiretroviral therapy including

zidovudine (n=8) or stavudine (n=13) (in association with protease inhibitors in 12). All received ribavirin (1000 or 1200 mg/day) and  $\alpha$  interferon (3 MU three times/wk) for chronic hepatitis C infection. All patients had not responded (n=20) or relapsed (n=1) after a previous six month course of  $\alpha$  interferon therapy. HIV viral load (Monitor test) and CD4 cells count were measured at the beginning and every three months during and after ribavirin plus  $\alpha$  interferon therapy over a mean period of 11 (1) months. Clin. and biol. adverse effects were recorded. There was no significant variation in HIV viral load or CD4 cell counts after three or six months of ribavirin therapy compared with baseline values. Of the 21 subjects, three (14%) had an increase in HIV viral load of more than 0.5 log leading to discontinuation of ribavirin in one. Eleven of 21 (52.4%) and initial neg. HCV viremia at three (n=10) or six (n=1) months but only six were polymerase chain reaction neg. at the end of therapy, leading to rates for primary response and breakthrough of 23.8% and 28.5%, resp. Six months after completion of therapy, three patients relapsed (14.3%) and three (14.3%) had sustained virological response. Median Hb concentration decreased significantly after three and six months of ribavirin therapy (p=0.0002 and p=0.0003, resp.) leading to withdrawal of therapy in one patient. These preliminary results show that: (1) despite in vitro interactions between ribavirin, zidovudine, and stavudine, significant variation in HIV replication does not usually occur in HCV-HIV coinfecting patients receiving ribavirin and different antiretroviral regimens, including zidovudine and stavudine; (2)  $\alpha$  interferon and ribavirin combination therapy induced primary and sustained virological responses in 28.5% and 14.3% of treated subjects (who were previous non-responders to interferon therapy), resp.; (3) anemia is a frequent adverse event. Such results should be confirmed in larger prospective trials.

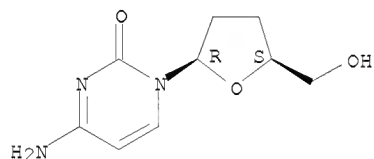
IT 7481-89-2, Zalcitabine

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(interferon- $\alpha$  and ribavirin combination therapy in humans  
coinfecting with hepatitis C virus and HIV)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 44 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2000:443717 CAPLUS

DN 133:37763

TI Can HCV affect the efficacy of anti-HIV treatment?

AU Filippini, P.; Coppola, N.; Scolastico, C.; Liorre, G.; Nocera, R.; Sagnelli, E.; Piccinino, F.

CS Institute of Infectious Diseases, School of Medicine, Second University of Naples, Naples, Italy

SO Archives of Virology (2000), 145(5), 937-944

CODEN: ARVIDF; ISSN: 0304-8608

PB Springer-Verlag Wien

DT Journal

LA English

AB To evaluate the impact of new antiretroviral combinations (HAART: Highly Active Anti Retroviral Therapy) on HCV replication and liver enzyme levels, we analyzed the changes in HCV viremia and aminotransferase levels in HIV and HCV co-infected patients. Moreover, to evaluate the influence of HCV infection on the efficacy of HAART, we compared the virological, immunological and biochemical response to antiretroviral combinations in anti-HIV positive subjects with or without HCV infection. We enrolled eight consecutive outpatients with

HIV-HCV coinfection and with indications for HAART (Group A). For each patient in group A, we selected an anti-HIV neg. patient with indications for HAART, pair-matched for age, sex, risk factor for HIV infection, presumed duration of infection, number of CD4 cells, HIV viremia and treatment schedule (Group B). A statistically significant increase in CD4 in both groups was found at 1st, 3rd and 6th month of antiretroviral therapy. A decrease in HIV-RNA in both groups was observed at 1st and 6th month of treatment. The percentage of patients with undetectable HIV-RNA at the 1st month was higher in Group B than in Group A (8/8 vs. 3/8,  $p = 0.025$ ). Basal HCV-RNA viremia was very high in each case and no variations during treatment were observed. During therapy the aminotransferase levels slightly decreased in Group A and consistently increased in Group B. In Group A the differences were not significant to the statistical anal.; in Group B the aminotransferase levels at 3rd and 6th month were significantly higher than those observed at the baseline.

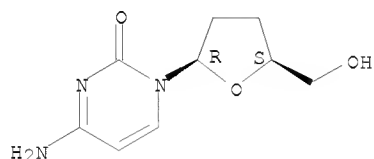
IT 7481-89-2, Zalcitabine

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(can HCV affect efficacy of anti-HIV treatment)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 45 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1999:390423 CAPLUS

DN 131:39724

TI Cytotoxin fusion proteins for use in killing of cells infected by pathogens

IN Dowdy, Steven F.

PA Washington University, USA

SO PCT Int. Appl., 123 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

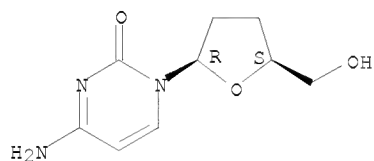
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PI	WO 9929721	A1	19990617	WO 1998-US26358	19981210
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	CA 2314267	A1	19990617	CA 1998-2314267	19981210
	AU 9918182	A	19990628	AU 1999-18182	19981210
	EP 1037911	A1	20000927	EP 1998-963079	19981210
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
	US 6221355	B1	20010424	US 1998-208966	19981210
	JP 2002505077	T	20020219	JP 2000-524312	19981210
PRAI	US 1997-69012P	P	19971210		
	US 1998-82402P	P	19980420		
	WO 1998-US26358	W	19981210		

AB A method of controlling infection by killing infected cells is described. more fusion proteins that includes a transduction domain and a cytotoxic domain. The method uses fusion proteins of cytotoxins and a

protein that directs entry into the cell (a transduction domain). The cytotoxic domain is specifically activated by a pathogen infection, e.g. by being processed by an infection-specific protease. Activation of the cytotoxin effectively kills or injures cells infected by one or a combination of different pathogens. The cytotoxin may be a protease or a prodrug-activating enzyme such as a thymidine kinase. In particular the method is directed at the treatment of HIV infection. Suitable transduction domains can be obtained from, inter alia, the tat protein, the Antennapedia gene product, and VP22 of herpes simplex virus. The method appears to be effective in transporting very large proteins into cells and can also tolerate a significant degree of unfolding or incorrect folding. A fusion protein of the TAT transduction domain and human caspase 3 (CPP-32) was shown to be effective at killing HIV-infected cells. The effect was blocked by the HIV proteinase inhibitor Ritonavir, and mutation of the active site cysteine to methionine.

IT 7481-89-2, DdC  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (in combination treatment of infection; cytotoxin fusion proteins for use in killing of cells infected by pathogens)  
 RN 7481-89-2 CAPLUS  
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 46 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 1998:147346 CAPLUS  
 DN 128:213381  
 OREF 128:42137a,42140a  
 TI Compositions and methods for treating infections using analogs of indolicidin  
 IN Fraser, Janet R.; West, Michael H. P.; Krieger, Timothy J.; Taylor, Robert; Erfle, Douglas  
 PA Micrologix Biotech, Inc., Can.  
 SO PCT Int. Appl., 130 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 3

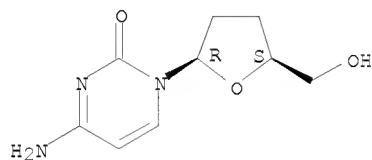
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9807745	A2	19980226	WO 1997-US14779	19970821
WO 9807745	A3	19980709		
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RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2263799	A1	19980226	CA 1997-2263799	19970821
AU 9743279	A	19980306	AU 1997-43279	19970821
EP 925308	A2	19990630	EP 1997-941352	19970821
EP 925308	B1	20020605		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001500477	T	20010116	JP 1998-510994	19970821
EP 1174439	A2	20020123	EP 2001-119148	19970821
EP 1174439	A3	20030326		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				



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AT 218579	T	20020615	AT 1997-941352	19970821
ES 2178000	T3	20021216	ES 1997-941352	19970821
HK 1021824	A1	20030221	HK 1999-106212	19991230
US 20040009910	A1	20040115	US 2003-351985	20030124
US 7390787	B2	20080624		
JP 2005225857	A	20050825	JP 2004-242925	20040823
JP 4073900	B2	20080409		
PRAI US 1996-24754P	P	19960821		
US 1997-34949P	P	19970113		
US 1997-915314	A1	19970820		
EP 1997-941352	A3	19970821		
JP 1998-510994	A3	19970821		
WO 1997-US14779	W	19970821		
US 2000-667486	A1	20000922		
OS MARPAT 128:213381				
AB	Comps. and methods for treating infections, especially bacterial infections, are provided. Indolicidin peptide analogs containing at least two basic amino acids are prepared. The analogs are administered as modified peptides, preferably containing photo-oxidized solubilizer.			
IT	7481-89-2, Zalcitabine			
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)			
	(indolicidin analogs, and combinations with other agents, for treating infections)			
RN	7481-89-2 CAPLUS			
CN	Cytidine, 2',3'-dideoxy- (CA INDEX NAME)			

Absolute stereochemistry. Rotation (+).



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(FILE 'HOME' ENTERED AT 11:06:27 ON 30 AUG 2008)

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L3	STRUCTURE UPLOADED
L4	20 S L1
L5	2 S L2
L6	1 S L3
L7	7 S L2 FULL
L8	10 S L3 FULL

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L9	270 S L7 OR L8
L10	5 S L9 AND (FLAVIVIRUS OR PESTIVIRUS OR HCV OR FLAVIVIRIDAE)
	S L1

FILE 'REGISTRY' ENTERED AT 11:12:20 ON 30 AUG 2008

L11	666 S L1 FULL
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FILE 'CAPLUS' ENTERED AT 11:12:21 ON 30 AUG 2008

L12	2495 S L11 FULL
L13	46 S L12 AND (FLAVIVIRUS OR PESTIVIRUS OR HCV OR FLAVIVIRIDAE)

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	ENTRY	SESSION
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L14 STRUCTURE UPLOADED

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L15 STRUCTURE UPLOADED

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PROJECTED ITERATIONS: 19591 TO 23529  
PROJECTED ANSWERS: 1 TO 80

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McIntosh

10045292

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	ENTRY	SESSION
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FILE COVERS 1907 - 30 Aug 2008 VOL 149 ISS 10  
FILE LAST UPDATED: 29 Aug 2008 (20080829/ED)

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      208 L18
L19    274 L17 OR L18
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      241 ORTHOMYXOVIRIDAE
      27037 "INFLUENZA"
      12 "INFLUENZAS"
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      393798 "VIRUS"
      82981 "VIRUSES"
      408732 "VIRUS"
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      107 "ORTHOMYXOVIRUSES"
      342 "ORTHOMYXOVIRUS"
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      82981 "VIRUSES"
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      4 "RESPIRATORIES"
      137604 "RESPIRATORY"
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McIntosh

10045292

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362131 "HUMANS"  
2212177 "HUMAN"  
("HUMAN" OR "HUMANS")  
397 "METAPNEUMOVIRUS"  
31 "METAPNEUMOVIRUSES"  
397 "METAPNEUMOVIRUS"  
("METAPNEUMOVIRUS" OR "METAPNEUMOVIRUSES")  
326 "HUMAN METAPNEUMOVIRUS"  
("HUMAN" (W) "METAPNEUMOVIRUS")  
4105 "SENDAI"  
393798 "VIRUS"  
82981 "VIRUSES"  
408732 "VIRUS"  
("VIRUS" OR "VIRUSES")  
3249 "SENDAI VIRUS"  
("SENDAI" (W) "VIRUS")  
L20 4 L19 AND ((ORTHOMYXOVIRIDAE OR "INFLUENZA VIRUS") OR "ORTHOMYXOVIRUS" OR (PARAMYXOVIRIDAE OR "MUMPS VIRUS") OR "RESPIRATORY SYNCYTIAL VIRUS" OR "HUMAN METAPNEUMOVIRUS" OR "SENDAI VIRUS")

=> d bib abs hitstr 1-4 120

L20 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2003:492694 CAPLUS  
DN 139:47125  
TI Induction of viral mutation by incorporation of miscoding ribonucleoside analogs into viral RNA, and drug screening method  
IN Loeb, Lawrence A.; Mullins, James I.  
PA University of Washington, USA  
SO U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 958,065.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 20030119764	A1	20030626	US 2000-522373	20000310
	US 6887707	B2	20050503		
	US 6063628	A	20000516	US 1997-958065	19971027
	US 20050187180	A1	20050825	US 2005-98796	20050404
PRAI	US 1996-29404P	P	19961028		
	US 1997-40535P	P	19970227		
	US 1997-958065	A2	19971027		
	US 2000-522373	A3	20000310		

AB The present invention is directed to the identification and use of ribonucleoside analogs to induce the mutation of an RNA virus, including BVDV, HIV and HCV, or a virus which otherwise replicates through an RNA intermediate. The increase in the mutation rate of the virus results in reduced viability of progeny generations of the virus, thereby inhibiting viral replication. In addition to these methods and related compns., the invention provides methods and combinatorial chemical libraries for screening ribonucleoside analogs for mutagenic potential.

IT 957-77-7, 5-Hydroxyuridine 957-77-7D, 5-Hydroxyuridine, derivs.

RL: BSU (Biological study, unclassified); CUS (Combinatorial use); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); USES (Uses)

(induction of viral mutation by incorporation of miscoding ribonucleoside analogs into viral RNA, and drug screening method)

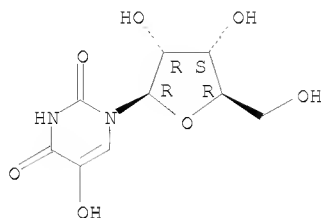
RN 957-77-7 CAPLUS

CN Uridine, 5-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

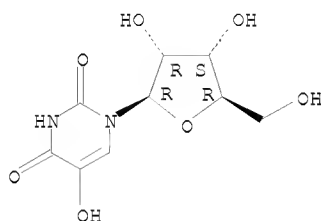
McIntosh

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RN 957-77-7 CAPLUS  
CN Uridine, 5-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2002:314958 CAPLUS  
DN 136:340939  
TI Preparation of modified nucleosides for treatment of viral infections and  
abnormal cellular proliferation  
IN Stuyver, Lieven; Watanabe, Kyoichi A.  
PA Pharmasset Limited, USA  
SO PCT Int. Appl., 230 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002032920	A2	20020425	WO 2001-US46113	20011018
	WO 2002032920	A3	20040219		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	CA 2426187	A1	20020425	CA 2001-2426187	20011018
	AU 2002028749	A	20020429	AU 2002-28749	20011018
	US 20030087873	A1	20030508	US 2001-45292	20011018
	EP 1411954	A2	20040428	EP 2001-987756	20011018
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR			
	JP 2004533406	T	20041104	JP 2002-536301	20011018
	CN 1646141	A	20050727	CN 2001-820816	20011018
	BR 2001014837	A	20060509	BR 2001-14837	20011018
	AU 2002228749	B2	20080424	AU 2002-228749	20011018
	US 20070031824	A1	20070208	US 2004-854870	20040527
	US 20070196824	A1	20070823	US 2007-686499	20070315
	AU 2007240180	A1	20080103	AU 2007-240180	20071207
	KR 2008041296	A	20080509	KR 2008-707867	20080331
PRAI	US 2000-241488P	P	20001018		

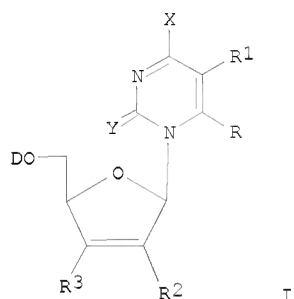
McIntosh

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US 2001-282156P	P	20010406
US 2000-256067P	P	20001215
US 2001-8140	B1	20011018
WO 2001-US46113	W	20011018
KR 2003-705461	A3	20030418
US 2004-854870	A3	20040527

OS MARPAT 136:340939

GI

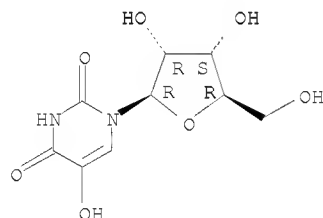


AB Modified nucleosides, e.g. I, wherein D is hydrogen, alkyl, acyl, monophosphate, diphosphate, triphosphate, monophosphate ester, diphosphate ester, triphosphate ester, phospholipid or amino acid; X is H, halogen, NH<sub>2</sub>, substituted amine, oxime, OH, alkoxy, SH, thioalkyl; Y is O, S, Se; R and R<sub>1</sub> are independently H, alkyl, alkenyl, alkynyl, aryl, alkylaryl, halogen, NH<sub>2</sub>, substituted amine, oxime, hydrazine, OH, alkoxy, SH, thioalkyl, NO<sub>2</sub>, NO, CH<sub>2</sub>OH, CH<sub>2</sub>OH, ester, CONH<sub>2</sub>, amide, CN; R<sub>2</sub> and R<sub>3</sub> are independently H, halogen, OH, SH, OMe, SMe, NH<sub>2</sub>, NHMe, CH:CH<sub>2</sub>, CN, CH<sub>2</sub>NH<sub>2</sub>, CH<sub>2</sub>OH, CO<sub>2</sub>H; were prepared for treating a Flaviviridae (including BVDV and HCV), Orthomyxoviridae (including Influenza A and B) or Paramyxoviridae (including RSV) infection, or conditions related to abnormal cellular proliferation, in a host, including animals, and especially humans. This invention also provides an effective process to quantify the viral load, and in particular BVDV, HCV or West Nile Virus load, in a host, using real-time polymerase chain reaction ("TR-PCR"). Addnl., the invention discloses probe mols. that can fluoresce proportionally to the amount of virus present in a sample. Thus, (1'R,2'S,3'R,4'R)-1-[2,3-dihydroxy-4-(hydroxymethyl)cyclopentan-1-yl]-5-fluorocytosine was prepared and tested in vitro as antiviral and antitumor agent.

IT 957-77-7P 69321-95-5P 170421-84-8P  
415705-12-3P 415705-25-8P  
RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of modified nucleosides for treatment of viral infections and abnormal cellular proliferation)

RN 957-77-7 CAPLUS  
CN Uridine, 5-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

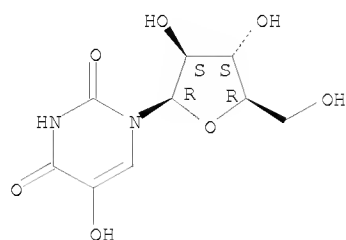


RN 69321-95-5 CAPLUS  
CN 2,4(1H,3H)-Pyrimidinedione, 1-β-D-arabinofuranosyl-5-hydroxy- (CA INDEX NAME)

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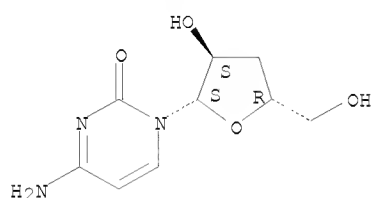
Absolute stereochemistry.



RN 170421-84-8 CAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-(3-deoxy- $\beta$ -L-erythro-pentofuranosyl)-  
(CA INDEX NAME)

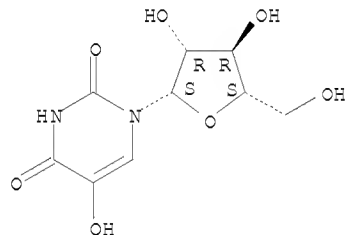
Absolute stereochemistry.



RN 415705-12-3 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1- $\beta$ -L-arabinofuranosyl-5-hydroxy- (CA  
INDEX NAME)

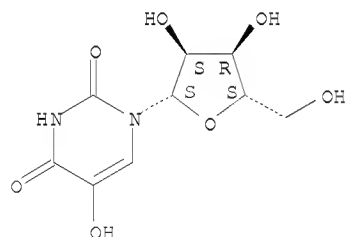
Absolute stereochemistry.



RN 415705-25-8 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 5-hydroxy-1- $\beta$ -L-ribofuranosyl- (CA INDEX  
NAME)

Absolute stereochemistry.



IT 7057-33-2P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic  
preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of modified nucleosides for treatment of viral infections and  
abnormal cellular proliferation)

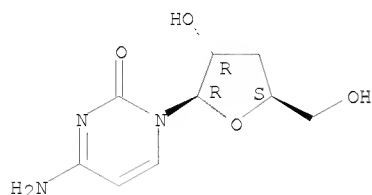
RN 7057-33-2 CAPLUS

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CN Cytidine, 3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L20 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1998:293319 CAPLUS

DN 129:579

OREF 129:147a,150a

TI Induction of viral mutation by incorporation of miscoding ribonucleoside analogs into viral RNA

IN Loeb, Lawrence A.; Mullins, James I.

PA University of Washington, USA

SO PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 9818324	A1	19980507	WO 1997-US19670	19971027
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2269213	A1	19980507	CA 1997-2269213	19971027
	AU 9850959	A	19980522	AU 1998-50959	19971027
	AU 740916	B2	20011115		
	EP 948256	A1	19991013	EP 1997-913882	19971027
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	NZ 335000	A	20001222	NZ 1997-335000	19971027
	JP 2001525797	T	20011211	JP 1998-520739	19971027
	NZ 507848	A	20050128	NZ 1997-507848	19971027
PRAI	US 1996-29404P	P	19961028		
	US 1997-40535P	P	19970227		
	WO 1997-US19670	W	19971027		

AB The invention is directed to the identification and use of ribonucleoside analogs to induce the mutation of an RNA virus, including HIV and HCV, or a virus which otherwise replicates through an RNA intermediate. The increase in the mutation rate of the virus results in reduced viability of progeny generations of the virus, thereby inhibiting viral replication. In addition to these methods and related compns., the invention provides methods and combinatorial chemical libraries for screening ribonucleoside analogs for mutagenic potential.

IT 957-77-7, 5-Hydroxyuridine 957-77-7D, 5-Hydroxyuridine, derivs.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(induction of viral mutation by incorporation of miscoding ribonucleoside analogs into viral RNA, and screening method)

RN 957-77-7 CAPLUS

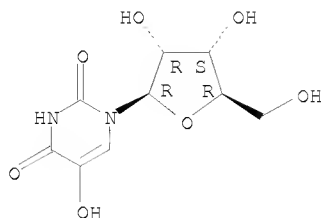
CN Uridine, 5-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

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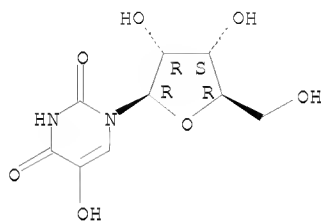


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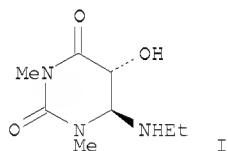
RN 957-77-7 CAPLUS  
CN Uridine, 5-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 1995:689228 CAPLUS  
DN 123:340717  
OREF 123:61171a,61174a  
TI Studies on the chemistry of pyrimidine derivatives with dimethyldioxirane: synthesis, cytotoxic effect and antiviral activity of new 5,6-oxiranyl-5,6-dihydro and 5-hydroxy-5,6-dihydro-6-substituted uracil derivatives and pyrimidine nucleosides  
AU Saladino, Raffaele; Bernini, Roberta; Crestini, Claudia; Mincione, Enrico; Bergamini, Alberto; Marini, Stefano; Palamara, Anna Teresa  
CS Dip. Agrochim. Agrobiol., Univ. Viterbo "La Tuscia", Viterbo, 01100, Italy  
SO Tetrahedron (1995), 51(27), 7561-78  
CODEN: TETRAB; ISSN: 0040-4020  
PB Pergamon  
DT Journal  
LA English  
GI



AB The oxidation of uracil derivs. and pyrimidine nucleoside performed in CH<sub>2</sub>Cl<sub>2</sub> with dimethyldioxirane afforded new 5,6-oxiranyl-5,6-dihydro and cis-/trans-5,6-dihydroxy-5,6-dihydro-derivs. When the oxidns. were performed in the presence of methanol as nucleophile cis- and trans-5-hydroxy-6-methoxy-5,6-dihydro derivs. were obtained in acceptable yields. Cis- and trans-1,3-dimethyl-5-hydroxy-6-alkylamino-5,6-dihydro uracils were obtained by nucleophilic ring opening of the 1,3-dimethyl-5,6-oxiranyl-5,6-dihydro uracil in the purified form. Interestingly some of the new title products revealed low cytotoxicity and selective antiviral activity against DNA and RNA Viruses. In particular, compound I shows a strong and selective inhibition of the Sendai virus with lower effect on Herpes Simplex-1 virus. Compound I is

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also able to slightly inhibit HIV-1 virus at high concns., but in this case a cytotoxic effect was observed

IT 24514-48-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and antiviral and cytotoxicity of oxiranyldihydro- and hydroxydihydro-substituted uracils and pyrimidine nucleosides)

RN 24514-48-5 CAPLUS

CN Uridine, 5,6-dihydro-5,6-dihydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

